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ABSTRACT

This guide provides ideas and recommendations from the business and education communities of Wisconsin to help provide an opportunity for all students to reach their fullest career potential. The first part deals with the need to restructure the educational system in order to concentrate on education for employment and on the procedures entailed in planning for education for employment. The second part of the guide consists of chapters devoted to each of the seven elements of education for employment. Each chapter describes the components and/or competencies of each element and gives sample activities. The seven elements are business and education partnerships; practical application of basic skills; career exploration, planning, and decision making; employability skills and attitudes; school-supervised work experiences; knowledge of business operations and economics; and contemporary vocational education programs. (Appendixes include the text of the Education for Employment Administrative Rule, teacher preparation standards, a demonstration grants report, guidelines on collecting and using labor market information, a sample student follow-up survey form, school-business partnership resources, economics education resources, questions and answers about education for employment, and a suggested reading list.) (MN)

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EDUCATION FOR EMPLOYMENT

A Resource and Planning Guide

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Wisconsin Department of Public Instruction / Herbert J. Grover, State Superintendent

Education for Employment: A Resource and Planning Guide

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Foreword

The social and economic development of a state depends in large measure on how effectively its resources are used to provide a work force geared to the needs of business and industry. In order to create an impact on economic development, Wisconsin must develop a work force that is effective and efficient at producing goods and services that are in global demand. A well-trained work force can attract business and industry to the state and may be a key to Wisconsin's economic future. An investment in education for employment will provide substantial rewards to the state in the form of enhanced economic development.

Education for employment promotes economic development by attacking unemployment and underemployment from several fronts. It impacts on entry-level employees by changing the nature of work preparation. It can reduce the number of students who drop out of school and become disenfranchised from a rapidly changing social and economic environment. It updates school programs to reflect competencies required by a changing economy, and it encourages lifelong learning. It also fosters partnerships between education and business/industry to create the finest, best educated, most skilled work force in America.

The ultimate success of education for employment will depend on the people of Wisconsin and their ability to collaborate, join forces, and guarantee that our students are both knowledgeable and employable. If we can develop written warranties for goods and services, why can't we guarantee each student an opportunity to succeed in the world of work? Students are the most necessary and valuable resource we have produced. The economic future of Wisconsin depends on them.

Herbert J. Grover
State Superintendent

Acknowledgments

Education for Employment: A Resource and Planning Guide has been endorsed by the Governor's Council on Business and Education Partnerships. Significant contributions and suggestions from the Council were incorporated into the final copy of the guide. As a result of the Council's efforts, this guide provides ideas and recommendations from the business and educational communities of Wisconsin to help provide an opportunity for all Wisconsin students to reach their fullest potential. An expanded explanation of the Council appears in Section 3.

In addition to the Council's input, a draft was distributed throughout the state through workshops and meetings designed to gather material, ideas, and suggestions for improvement. So many participants shared their talent, time, and expertise to help make the guide relevant, practical, and beneficial that we cannot list them individually but we wish to thank them collectively at least.

Many of the ideas and examples used in this guide are a result of activities that have been conducted by the state's model projects. We appreciate their willingness to share these materials. A complete list of the model projects can be found as part of Appendix C.

The Janesville Foundation has generously supported the concepts of education for employment and business and education partnerships by providing a grant to help develop this publication. We would like to thank Alan Dunwiddie, president and executive director, for the Foundation's assistance.

We also are appreciative of the work of our colleagues at the Department of Public Instruction, whose professional skills transformed our drafts from a manuscript into printed pages. Special acknowledgment goes to our editor, Kathleen D. McCleave, who facilitated this process. Additional thanks go to Patricia Braley, Greg Doyle, and Kris Whitman for proofreading; to Sandra House for word processing/typesetting; and to Victoria Rettenmund for assistance with design and graphics.

Introduction 1

> Much of the rhetoric of the recent education reform movement has been couched in the language of decline, suggesting standards have slipped and that the education system has grown lax and needs to return to some earlier performance standards to succeed. Our view is very different. We do not believe the educational system needs repairing; we believe it must be rebuilt to match the drastic change needed in our economy if we are to prepare our children for productive lives in the 21st century. . . . The cost of not doing so will be a steady erosion in the American standard of living.
>
> *A Nation Prepared: Teachers for the 21st Century* (NY: Carnegie Forum on Education and the Economy, 1986, p. 14)

Education for Employment: The Need to Restructure

International economic competition, the changing nature of work itself, and our society's changing demographics strongly support the imperative that we must restructure our nation's public education, not just repair it. While it is far more comfortable to consider reforming or repairing the existing system—a kind of "putting back in order" a system that's somehow out of whack—the realities of our global economy call for far more than repair.

Internationally, the industrial age has given way to the technological/information age. In the United States, an educational system that served us well through the industrial age by producing factory workers and managers must now give way to one that will prepare *all* our nation's youth for the economic work place and lifelong learning realities of the twenty-first century. As technology explodes and the economy becomes global, changes occur not only in what work we do, but also the very nature of how we do that work.

Defining the lifelong learning realities of the twenty-first century is not an easy task. Perhaps as many as a third of all jobs that will be available in the year 2000 do not exist today. Yet, today's kindergartners are the entry-level work force of the twenty-first century. So what are the new basic skills these students must master?

The basic skills considered prerequisite to employment in the past were reading, writing, arithmetic, and a general understanding of science, culture, and government. Are these same basic skills all that are needed to prepare our youth for employment in the twenty-first century? While the basics of the past are still a foundation, the explosion of knowledge available

today due to technological advances, the need to retain a competitive edge in a global economy, and the economic reality that both men and women work outside the home demand an expanded vision of basic skills. The need for computer literacy, critical thinking skills, an understanding of business operations and economics, and employability skills (including human relations development) cannot be ignored. As we restructure our schools, we must rethink our national consensus on what is "basic." For this restructuring, what pieces do we need to construct a responsive education program for our youth and our communities' economic health, and what process can we use to assemble them?

The Global Economy, Technology, and Demographics: Engines of Change

Both the global economy and the U.S. economy have changed drastically in the past 20 years. In a 1985 study on American productivity for the Committee for Economic Development, Denis P. Doyle concluded, "Economic productivity and the quality of a nation's education system cannot be separated. In a world economy dominated by technological advancement, education and economic performance are indivisible."

The noncommunist countries of Europe and Asia have demonstrated that human resources are more important than physical ones and that a well-educated competitive work force, with habits of collaboration and cooperation, is one of the most important assets a nation can possess. Using their intellectual capital, those countries adopted and adapted machinery and technologies that had made the U.S. industrial economy strong. Using assembly line machines and technologies, what began as a low-skilled work force with minimal competencies became extremely productive. In countries like Japan, Brazil, Korea, and Mexico, a highly motivated work force took hundreds of thousands of low-skilled but high-paying factory (and now even information processing) jobs from the United States because labor costs were much lower and newly built factories were much more efficient.

It appears the United States either must work toward some sort of high-wage, high-technology, innovative economy or it must ask each succeeding generation to accept a lower standard of living. Here lies an opportunity. As a nation we must set aside nostalgia for the past and look forward to the opportunity to restructure our schools for our children's future.

An advanced economy will demand more of its work force—more creativity, more mental flexibility, and more capacity to adapt to rapidly changing work demands and job structures. To meet these needs, our schools must graduate students who demonstrate higher literacy skills, like analytical writing, problem solving, and critical thinking (argument, analysis, synthesis, interpretation, and evaluation). Our students also must have good work habits and be adaptable, flexible, and capable of working both independently and in teams. Most importantly, our students must demonstrate the ability to learn.

Clearly, the changing nature of work, the competitive global economy, the need for a work force with higher-order literacies, and the changing demographics of this country require a restructuring of our schools so that *all* youth have an opportunity to become economically productive citizens. To do less may relegate the next generation of workers to a lower standard of living and make the American Dream unattainable for many Americans.

The Wisconsin Solution: From the Parker Project to Education for Employment

What pieces do we need to construct a responsive education program for our youth and our communities' economic health, and what process can we use to assemble them? The Wisconsin Department of Public Instruction is implementing an education for employment standard that defines the educational pieces needed, outlines the planning process, and evaluates the effectiveness of those pieces in creating a responsive and comprehensive K-12 education program.

The education for employment concept grew out of the work of the Parker Project, a joint education/business research effort between the Department of Public Instruction and the Parker Pen Foundation of Janesville, Wisconsin. The Parker Project was a cooperative effort initiated because of a growing concern over the number of youth who failed to make a successful transition from school to the work world.

Begun in 1981, Phase I of the Parker Project was designed to provide the information base needed to assess the schools' capacity to meet the needs of business, students, and society and to project future business needs. According to employer surveys, young job applicants were weak in

- understanding the value and importance of work;
- verbal communication skills;
- spelling, writing, and grammar;
- initiating, planning, and directing their own work;
- recognizing problems and solving them independently;
- job application and interviewing skills;
- understanding career ladders and advancement;
- personal appearance; and
- understanding the American economic system and general business operations.

Employers also indicated most jobs were lost by new employees because of improper work habits and poor attitudes toward work. When asked what skills needed more emphasis in our secondary schools, employers said

- oral communications and speech,
- technology (applied science),
- computer literacy and applied word/information processing,
- job-specific occupational and entry skills,
- work experience,
- business economics, and
- human relations and decision making.

Using the research base developed in Phase I, the Parker Project brought business, labor, and education together in Phase II and Phase III. It was in Phase II that the concept of education for employment emerged, and the goals of education for employment were determined

- to create the finest, best educated, most skilled work force in America; and
- to define and deliver what all youth need to become productive, economically self-sufficient citizens, thereby enabling them to contribute to Wisconsin's economic development.

Phase III of the Parker Project developed state policy initiatives for the future. (Appendix A reproduces the Education for Employment Administrative Rule.) Phase III recognized the key role K-12 schools play in job preparation and economic development. Five demonstration grant sites were selected as pilot projects for education for employment to serve as models for the rest of the state. (Their demonstration reports appear in Appendix C.)

During the 1985-87 budget session, the state legislature responded to the research and recommendations of the Parker Project by enacting an education for employment standard (m) for school districts and creating the Governor's Council on Business and Education Partnerships. In considering what students need to be prepared for the future working world, the education for employment initiative identified the following seven critical elements:

- business and education partnerships;
- practical application of basic skills;
- career exploration, planning, and decision making;
- employability skills and attitudes;
- school-supervised work experiences;
- knowledge of business operations and economics; and
- contemporary vocational education programs.

The Parker Project found that in Wisconsin about 60 percent of youth enter the work force at or before graduation. Consequently, the major portion of the state's entry-level "job training" takes place at the high school level. Yet, employers and educators agreed that narrow job training would not meet work force needs of the future. In fact, technology and the global econ-

omy were changing the work place and its requirements so quickly that narrow, job specific training was impractical as well as nearly impossible. Finally, the Parker Project found that neither traditional vocational education nor basic academic programs alone prepare students adequately for jobs or for lifelong learning.

In defining skills needed for the future working world, it became apparent in the Parker Project that education needed to extend beyond the basic three Rs. For example, an insurance company that participated looks for employees who demonstrate creative thinking; competition is stiff in the insurance business and the company needs new ideas. It also wants employees who can communicate with something other than a computer—human relations and the ability to get along with others were identified as key ingredients for success.

The education for employment concept that emerged was designed to concentrate on helping all students develop employability skills; an understanding of business operations and economics; and career exploration, planning, and decision-making skills. Students learn the need for basic skills in the working world through practical applications. Employers and educators gather on a regular basis to discuss what should be considered basic education for the future. The answers they find help refocus the content taught in the classroom: More of the wrong subject matter will not cure the perceived ills of our nation's schools.

Education for employment was *not* intended to focus only on "at risk" students and those who may not immediately attend postsecondary education. The evidence was clear from the Parker Project that *all* students, regardless of future career choices, needed to be educated for eventual employment and careers whether they entered the work force directly upon graduating from high school or at a later date. Attitudes toward work are not formed during adulthood; rather, they develop from the early stages of childhood and continue to evolve.

Education for employment refocuses the mission of public elementary and secondary education by saying *all* youth should be prepared to work and for lifelong learning. The education for employment concept embodies John Dewey's notion of "learning by doing" and therefore links learning to earning. Education for employment also envisions educational planning based on labor market and educational data; an increased business/industry/community role in deciding upon, delivering and evaluating education and training services; and a fundamental change in what's taught and how it's taught in schools.

The Education for Employment Concept

Oliver Wendell Holmes once stated, "Man's mind, once stretched by a new idea, never regains its original dimensions." The process of restructuring requires a fresh look at the future. First, one has to know where one is headed and why. Next, the restructuring process requires a plan or design and the necessary building components to complete the design. The education for employment policy concept combines direction provided by the Parker Project with an added dimension in the planning process—using the combined expertise of business, community, and education to design programs effective in preparing students for the future working world.

To prepare *all* youth for productive lives, for self-sufficiency in the twenty-first century, the seven elements of education for employment form the building blocks of a sound and responsive education program. All youth should be able to connect what they learn in school to how it's used in the work place, should understand and plan for careers, should master human relations skills needed to communicate and work with others, should understand the fundamentals of work and our economy, and should have access to contemporary technical training and to school-supervised work experience.

These elements, when combined, push education outside the four walls of the school and into the community as classroom. Students and teachers make the direct link between what's happening in the classroom and how it's used in the work place.

While the education for employment policy

concept is composed of seven program elements, it is also the process by which those seven elements are examined, implemented, and evaluated within the school/community context. First, a council of community leaders from business, labor, education, and other groups is formed. Labor market information, student follow-up data, employer needs, and economic development data is gathered. The Education for Employment Council uses these data as the basis for creating an education for employment plan that addresses how each school/community will accomplish the seven elements. Lastly, the plan is implemented in the total K-12 education program (both elementary and secondary schools) and is yearly reviewed, evaluated, and adjusted by the Education for Employment Council.

Education for employment defines why and how schools do business and assures that schools have a stake in economic development. The policy concept is based on labor market information/educational data, integrates educational and job training preparation, and forms a business-school-community partnership. The policy concept joins vocational and academic, merges learning with earning, and requires students to apply what they've mastered.

Restructuring: A Business, Community, and Education Partnership

> We believe that it is appropriate and necessary to reassess the way in which schools prepare students to function in the work force and in life. Educators need to redesign their programs and establish and enforce reasonable standards of achievement so that a high school diploma once again has meaning and value.
>
> *Investing in our Children: Business and the Public Schools*
> (NY: Committee for Economic Development, 1985, p. 15)

> We are not just partners in this venture—we are a powerful partner. If business-school partnerships achieve substantial results over the long haul, we may deserve half the credit. If they fail, we may deserve more than half the blame.
>
> *William S. Woodside, Chairman, American Can Company*
> ("The Fourth R: Workforce Readiness," Washington, DC: National Alliance of Business, 1987, p. 21)

The development of business and education partnerships is fundamental to education for employment. At the more traditional level, these partnerships help deliver programs through membership on advisory councils, equipment donation, career days, award dinners, work experience programs, speakers for special school functions, and adopt-a-school programs. While these kinds of business/education partnerships have an impact on students, selected teachers, and some classrooms, they do not address the fundamental policy issues or the restructuring of public education.

In order to restructure education so that it can effectively prepare *all* youth, business leaders now see that they need a greater commitment, more hands-on policy development, and a broader view of the preparation of our future work force. Quality education for all is no longer an issue of community responsibility or good corporate citizenship; rather, it's now a matter of community and corporation survival.

The education for employment planning process, based on the creation of a required communitywide council composed of at least one-half business and industry representatives, addresses the notion that the economic battles of the future will be won in the classroom. It also addresses the notion that the key to successfully rebuilding our public education system is to get people inside and outside the system working together and dealing with the whole child and the whole K-12 education program. As a blueprint for managing change, education for employment outlines a communitywide coalition

building process to plan for and implement creatively the changes needed for restructuring.

The education for employment policy concept, with its seven key building blocks and its communitywide planning process for putting those pieces together, recognizes the permanence of change, the primary importance of people in planning for and dealing with change, the necessity to reach out and build communities of purpose with the schools and with businesses, and the imperative to restructure the schools so that *all* youth are productive, self-sufficient citizens in an economically healthy and politically stable United States when the twenty-first century arrives.

Planning for Education for Employment 2

Defining Education for Employment

What is education for employment? A program? A process? How does one go about planning for it and doing it? Some confusion about education for employment may arise because the connotative meaning for "program" is often something educationally separate and distinct like "the English program," "the dropout program," or "the technology education program." In schools, a "program" often operates within a traditionally defined subject discipline or focuses on a distinct group of students and therefore is something planned in isolation. Education for employment is a different kind of program in that it is meant to be integrated into all other educational endeavors. It is not meant to stand alone.

The Education for Employment Standard creates a mechanism for helping all students become economically self-sufficient citizens. It begins by requiring that a representative education for employment council be created for a district or consortium of districts. That council is to develop a long-range plan, which should become the blueprint for change and integration. The K-12 plan is to be based on economic and student realities. The Education for Employment Standard requires that data for education for employment plan development be collected based upon pupil needs and interests, equal education opportunity, labor market information, impact on economic development and job creation, employment needs, graduate follow-up studies, and an evaluation of current programs and staff development needs. In creating the plan, a council becomes part of the coalition-building mechanism by gathering information, sharing expertise, and involving the community in education policy making. The council needs to base its K-12 education for employment plan on concrete data. Each council will want to know the community's, the region's, and the global employment picture; employment trends; what skills future jobs require; what happens to graduates; what's taught now and whether it matches what's needed; and staff development needs if changes are to be made.

After completing its analysis, the council creates a K-12 education for employment plan, which needs to address the following seven elements:

- business and education partnerships;
- practical application of basic skills;
- career exploration, planning, and decision making (which also addresses sex-role stereotyping);
- employability skills and attitudes;
- school-supervised work experiences;
- knowledge of business operations and economics (including entrepreneurship education and the knowledge needed to begin and operate a business); and

- contemporary vocational education programs.

In effect, education for employment is a policy concept that addresses the needed restructuring of education and outlines the process by which that change can be managed.

An Education for Employment Process

The following process can to be used locally in implementing the Education for Employment Standard:

Designate a staff person to coordinate the Education for Employment Program.

Establish an education for employment council. (Both business representatives and educators should be involved in selecting council members.)

- Membership. Each district does not have to appoint individual councils; consortium agreements can be arranged. The Council must be comprised of one-half business and industry representatives. Other members of the council can include teachers, administrators, pupil services personnel, board members, pupils, parents, representatives of job training partnership councils and district vocational/technical colleges or universities. It is important that the Council be representative of the population in the district or region, including females, minorities, and disabled persons.
- Function. Suggested council activities include
  - gathering economic and labor market information and conducting student follow-up studies,
  - reviewing K-12 vocational and academic curriculum and providing suggestions for implementing education for employment concepts,
  - analyzing curricular offerings and determining relevancy to future job forecasts,
  - deciphering and establishing goals and objectives based on the information obtained,
  - developing an education for employment plan that will ensure all K-12 students have access to the program (suggested plan outline appears later in this chapter),
  - revising the Education for Employment Plan as needed,
  - promoting the need for education for employment, and
  - participating in provision of work experiences for students.
- Organization. Once the Council membership is determined, it is important to consider guidelines for the effective organization of the Council.
  - Select a chairperson, preferably from business/community sector.
  - Familiarize the Council with its specific charges and responsibilities; provide background information and resource documents as needed.
  - Establish a timetable for meetings—a minimum of three meetings per year is suggested.
  - Provide agendas and minutes for meetings.
  - Establish a rotation schedule so that one-third of the Council is new each year. It is recommended that council membership be limited to three-year terms.
  - Divide the Council into subcommittees as deemed appropriate.
  - Keep members actively involved. People donating time and energy to council meetings typically are leaders who appreciate active involvement.

Gather and review labor market information, employment trends, and student follow-up studies.

- Establish a procedure to use in obtaining this information.

Develop an education for employment plan based on the following goals:

- to help prepare elementary and secondary pupils for future employment,
- to promote cooperation between business/industry and education, and
- to establish a role for public schools in economic development.

Integrate the following critical elements of the state standard into the school program:

- business and education partnerships (K-12);
- practical application of basic skills (K-12);
- career exploration, planning, and decision making (K-12);
- employability skills and attitudes (K-12);
- school-supervised work experiences (K-12);
- knowledge of business operations and economics (K-12); and
- contemporary vocational education programs (9-12).

Conduct activities needed to implement the plan, including

- curriculum development,
- staff training, and
- joint school/community projects.

Evaluate the Education for Employment Program based on the following criteria (make plan revisions as needed):

- student attendance rates;
- grade-point averages/skill levels/competencies mastered;
- decreased disciplinary referrals;
- employability skills and attitudes mastered;
- career exploration, planning, and decision-making goals achieved;
- student retention rates;
- graduation rates;
- postsecondary school attendance and completion; and
- employment rates.

Gathering, Analyzing, and Using Data

> If we cannot reach a consensus of what the end of education should be, then we cannot possibly agree on the proper means to reach that end, because the end obviously determines the means. What we need first is a national inquiry, and debate and resolution as to what kinds of people we want our children to grow up to be.
>
> *Sydney J. Harris*
> ("Strictly Speaking," Wisconsin State Journal–Madison)

The Education for Employment Plan and Data Collection

The point was made earlier that our education system needed to be restructured so that it can prepare all youth to meet the economic realities and work place changes of the twenty-first century. The education for employment policy concept offers a good blueprint for restructuring with its community, coalition-building council and its seven program elements providing the change mechanism needed for a K-12, long-range restructuring plan. This section focuses on how to develop the long-range plan upon a solid database.

A "realistic" database has three major components: current and projected employment and economic realities and trends, student follow-up data on what happened to graduates, and an assessment of current school programming and organizational capacity. The education for employment process needs a database for planning that ensures that the K-12 curriculum, instructional techniques, and experiences of today are based on economic and student realities of the future.

Using a solid database, the Education for Employment Council will evaluate economic trends, employment needs, and current school programming to reach a consensus on "what is"; will project what's needed for the future; and will then develop an education for employment plan to provide an opportunity for all students to become economically productive citizens.

Initial Planning Considerations. High school graduates of today and tomorrow will be confronted with dramatic changes in the makeup of the work place, the family, and the national economy. Are men and women prepared for their new economic and family-member roles,

for the changes of the twenty-first century? How can schools change the way they prepare students for employment, for careers, for lifelong learning? The first step in answering these questions is to assess the needs of students and the changes in the work place and in society. (Appendix D, about gathering and using labor market information, has sample data on jobs and educational/societal trends.)

Local data and trends, once defined, should be verified by the Education for Employment Council since they may vary dramatically from the national trends described in the media. These trends and projections, together with an analysis of the existing school programs and student follow-up data, will provide the basis for formulating a needs statement and strategy.

To help in this planning, school districts can contact their cooperative educational service agency (CESA) office for a copy of the county planning guide that has been developed to provide data on the local labor market, student follow-up, equity issues, and economic development needs. In addition, the Job Training Partnership Act requires that each of Wisconsin's 17 service delivery areas (SDAs) produce labor market information (LMI) and that the SDA's two-year Job Training Plan be based on this LMI. The Department of Industry, Labor and Human Relations is the state agency responsible for producing LMI.

Labor Market Information and Demographic Trends. LMI data can help communities understand the local economy and changes it has undergone during the growth period of the late 1970s, the recession of 1982-83, and the recovery following. Shifts in the importance of specific industries, size of employers, and growth industries all promote an awareness of the local economy in which we live and work.

For education planning, the vast array of information on the state and local economy needs to be distilled into long-term trends identifying changes that have taken place at the local level. These changes and projections may reflect national trends like recessions, periods of inflation and recovery, or they may be solely the result of local company decisions to expand or close facilities. Whichever, these trends need to be analyzed within the context of educational programs offered and what skills and knowledge are being taught in those courses. For instance, if LMI shows that the state and a region will employ few welders, drafters, or woodworkers, the Education for Employment Council may seriously question why a school or a number of local schools offer a technology education program concentrating on woodworking, drafting, and welding. When CESA 9's Education for Employment Council recently reviewed local labor market information, they found nearly one-quarter of the local work force was self-employed. This prompted an immediate review of school district curriculums to ensure students had courses/programs on understanding business operations, practical economics, and entrepreneurship.

To plan for the current and future needs of high school graduates, education planners also need to examine changes and trends that have taken place in the quality of life in the last 25 years. National and state trends can be verified at the local level using census data from the last three decades, which shows dramatic changes in the makeup of the work force and the family.

The work force changed in major ways—first, in sheer numbers with the introduction of the baby boom, and second, in a substantial increase in the percent of women employed outside the home. Between 1960 and 1980, the percent of mothers who have preschool children and are employed outside the home doubled; the majority are now in the labor force. Partially as a result of this trend, between 1960 and 1980, the Wisconsin labor force jumped from 1.5 million to 2.3 million workers.

The majority of women are employed outside the home now and women make up an increasing portion of the work force; yet the traditional preparation of women for employment and the subsequent jobs they take have resulted in a high concentration of women in low-paying jobs. Students, especially females, will have to choose their careers carefully if they expect significant financial rewards from investing in a college education. By 1980, the number of workers with some college had more than doubled from 1960, and by 1990 it is estimated that more than

one-half of the Wisconsin work force will have some college education. The cost of getting a college education will be high, but the cost of not having one may be higher. It should also be noted that attaining a college education doesn't automatically ensure a rewarding career. The U.S. Department of Labor reports that, because of a shift in the types of jobs available, one out of five college graduates in 1980 took jobs not considered by graduates to be appropriate to their education and abilities.

In any event, this is the kind of information the education for employment councils should have available. Once districts have gathered labor market information and demographic data (see samples and resource ideas in Appendix D), that data must be analyzed within the education context. When each of education for employment's seven elements is viewed in the context of labor market information and demographic trends, implications for planning, implementing, and evaluating educational programs are more apparent.

Follow-Up Studies of Graduates. The impact of education on future earnings, equity issues in education, success in postsecondary education, and success in the labor market are all critical issues that require accurate and local data for proper examination. There are three valuable sources Wisconsin educators can use to begin their assessment of student needs in these areas: surveys, census data, and attrition studies from the University of Wisconsin (UW) and from the vocational, technical, and adult education (VTAE) systems.

Survey data can provide a wealth of knowledge on the quality of school programs, but to be useful, surveys need to be well designed, carefully administered, and analyzed to accurately reflect the groups considered. In order to find out if a K-12 education met student employment and/or postsecondary education and training needs, the best source of information may be the consumers of that education—the students. A five-year follow-up survey of graduates could provide information such as type of employment; where students are located; what further education, if any, they pursued; how well their high school education prepared them; and their suggestions for improvement. (See Appendix E for sample student follow-up survey form.)

Follow-up data also can be gleaned from information from the census as well as from the U.S. Census Bureau's *Current Population Survey*. Information about earnings, employment, level of education, labor force participation, and family status demonstrates the impact of education for men and for women. Census studies are also the best source of data for examining equity issues. Levels of employment, earnings, occupations, and education can be charted for men and women for 5-, 10-, 20-, and 30-year periods after high school or college.

A more current and detailed analysis of student performance in postsecondary education may be available through the local VTAE and UW System schools. Registrars often conduct attrition studies that reveal enrollment and completion rates for incoming freshmen by high school district. These reports are often available upon request.

Surely graduate follow-up data also provides valuable insights for education planners about how well the K-12 education prepared youth for employment and/or school. In fact, this kind of information, describing how students evaluate their K-12 education, may be some of the most valuable data in planning for education for employment.

Evaluation of Current Programs and Staff Development Needs. The last component of gathering, analyzing, and using data focuses on the school's organizational capacity to change, adjust, and restructure the K-12 experience to be responsive to future employment and societal trends. The Education for Employment Council will need to assess the effectiveness of existing programs and curriculum and provide a mechanism for staff development. A sample chart that can be used in assessing current school programs follows (Chart 1). Changes will occur only if supported and carried out by the existing school administrative teaching and support staff.

The emphasis on data collection is not meant to be just an exercise in "fact finding." It is in-

tended to help the Council find out what is, project what will be, and plan how the school/community partnership can insure that the K-12 education experience will indeed prepare youth for success in the twenty-first century.

Program Development Tools

In order to do the kind of program analysis being suggested, a variety of assessment tools have been developed. The ones reproduced here can be used as is locally, or they can be adapted as needed to fit specific situations.

Program Assessment Chart

Chart 1, which follows, provides an easy way to review existing subject and program areas within a curriculum. By evaluating each discipline against the criteria given for each of the seven education for employment elements, areas where the criteria are being met or need implementing will stand out.

Education for Employment Program Assessment Chart*

Chart 1 can be used to assess existing school programs to determine which elements of education for employment are already being addressed in specific disciplines. Place a checkmark in the appropriate box to indicate true statements. School districts may want to start implementing education for employment in areas where no programs or activities currently exist. Other areas already being addressed will need to be reviewed at a later date for potential expansion or enhancement of activities.

	Agriculture Education	Art	At Risk	Business Education	Guidance	Health Occupations	Home Economics	Language Arts	Marketing	Mathematics	Music	Science	Social Studies	Technology Education
Business and Education Partnerships An advisory council of local business and community leaders is responsible for creating and maintaining partnerships.														
Staff development activities are designed to enhance the awareness of school staff and teachers about the need, methods, and means for integrating the business/education partnership concept into all phases of curriculum; to bring private industry personnel into the schools so they can better understand what the schools do; and to provide individual teachers with private/public sector job site experience.														
Resources, both equipment and human, are shared so that each partner benefits.														

*Developed by Charlene Peterson, Vocational Director, CESA 12, 301 13th Avenue East, Ashland, WI 54806.

	Agriculture Education	Art	At Risk	Business Education	Guidance	Health Occupations	Home Economics	Language Arts	Marketing	Mathematics	Music	Science	Social Studies	Technology Education
Planning, implementation, funding, and evaluation of projects, programs, and services are conducted cooperatively and collaboratively and are based on measurable and agreed upon objectives.														
Partnership activities enhance economic development and job retention/creation locally and in the labor market.														
Partnership activities further school improvement and educational reform.														
Practical Application of Basic Skills Staff development activities are designed to assist K-12 teachers in the integration • of basic skills into the vocational curriculum,														
• of world-of-work examples and competencies into the general education curriculum, and														
• across grade levels and disciplines with special regard for student populations with unique learning needs.														
Processes are established to evaluate the success of the total K-12 curriculum in promoting post-high school transition for students into the world of work and/or further education.														
Career exploration, planning, and guidance are integrated and reinforced districtwide.														

	Agriculture Education	Art	At Risk	Business Education	Guidance	Health Occupations	Home Economics	Language Arts	Marketing	Mathematics	Music	Science	Social Studies	Technology Education
Career Exploration, Planning, and Decision Making Students are taught the need and the processes for evaluating their abilities, interests, aptitudes, and attitudes as they make career decisions.														
Socioeconomic factors affecting life/work choices are stressed.														
Special emphasis is given to new, emerging, and non-traditional career choices.														
School district personnel place equal emphasis on all post-high school options—occupational, vocational, and educational.														
All students have the opportunity to explore career options through school-supervised work experiences.														
The existence and historical consequences of sex-role stereotyping in employment are addressed K-12.														
The K-12 developmental guidance process is based on competencies that are integrated into the general curriculum and accessible to all students.														
Follow-up studies are developed to determine the success of post-high school transition for all students.														

	Agriculture Education	Art	At Risk	Business Education	Guidance	Health Occupations	Home Economics	Language Arts	Marketing	Mathematics	Music	Science	Social Studies	Technology Education
A class and curriculum is developed for all students at the junior high school level that emphasizes career exploration, entrepreneurship, employability skills and attitudes, job-seeking and job-keeping skills.														
Employability Skills and Attitudes The K-12 curriculum includes specific education units, lessons, objectives, and evaluation criteria emphasizing employability skills and attitudes.														
Work experience methodologies emphasizing employability skills and attitudes are available to all students.														
A developmental guidance model is used to develop employment skills and attitudes.														
Private sector/school partnerships are used to ensure instruction in employment skills and attitudes.														
The teaching of employability skills and attitudes is part of both the vocational and general curriculum.														
The work ethic is integrated into total school policies and practices.														

	Agriculture Education	Art	At Risk	Business Education	Guidance	Health Occupations	Home Economics	Language Arts	Marketing	Mathematics	Music	Science	Social Studies	Technology Education
School-Supervised Work Experiences Work experience programs are taught by certified teachers/supervisors and have teacher/student ratios no greater than district classroom averages.														
Part-time work assignments, job shadowings, vocational exploration, community service, and/or job simulations are accessible to all students.														
Periodic work experience performance evaluations are completed by employers on skills and attitudes for each student.														
Written work experience agreements and educational plans define roles and responsibilities of the student, teacher, employee, and parent.														
Short-term field experiences offer activities to learn about work and related life roles by studying, observing, and participating in an environment (actual or simulated) where those roles occur.														
Knowledge of Business Operations and Economics A curriculum for economics is developed incorporating general knowledge of • business operations;														
• entrepreneurial skills;														
• agriculture and labor organizations;														

	Agriculture Education	Art	At Risk	Business Education	Guidance	Health Occupations	Home Economics	Language Arts	Marketing	Mathematics	Music	Science	Social Studies	Technology Education
• the free market and other world economies;														
• personal economic decisions in relation to career choices;														
• economic understandings, collective decisions, and personal potential at home and at work;														
• the influence of work performance on the standard of living and available goods and services;														
• market choices and economic activities; and														
• governmental influence on community and state economic well-being.														
An economics curriculum is integrated into the district K-12 social studies program and infused into vocational curriculums.														
All staff and teachers receive inservice training on the importance of student understanding of practical economics and business operations as part of their preparation for employment and/or further education or training.														
A curriculum is developed and units are made available for students on the importance and skills of the entrepreneur.														
Contemporary Vocational Education Programs A flexible program is maintained in order to adjust and respond to changes in labor market analyses.														

	Agriculture Education	Art	At Risk	Business Education	Guidance	Health Occupations	Home Economics	Language Arts	Marketing	Mathematics	Music	Science	Social Studies	Technology Education
Programs actively involve representatives of a variety of interest groups including K-12 school personnel, student organizations, the private sector, community representatives, and area VTAE staff/administration.														
All students have access to programs regardless of socioeconomic status or race, color, religion, sex, national origin, age, or handicap.														
All program areas are equally emphasized with respect to information available and accessibility (i.e., agriculture education, business education, health occupations, home economics, marketing, technology education, etc.).														
Community resources are used effectively in all areas.														
Labor market information and student needs are assessed and data is collected and analyzed so that school education and training programs are designed and updated to enhance students' employability in local and regional labor markets.														
Program areas provide students with an understanding of the range and nature of available occupations and the required skills and abilities needed for them.														
Programs encourage positive work attitudes and habits.														

Education For Employment Plan Outline

Following is a suggested outline to use when developing and writing a plan. Narrative response can be provided using the same headings and numerical sequence.

1. Education for Employment Coordinator. (Name designee.)

2. Business and Education Partnership Council and/or Education for Employment Council. (List membership and describe activities and goals.)

3. Assessment and Background Data. Describe information gathered and assess current needs. Each district or consortium shall determine the types of data to use. (Following are examples.)

   - Student needs and interests
   - Labor market information
   - Local economic development and job creation
   - Graduate follow-up studies
   - Evaluation of current programs
   - Staff development needs
   - Projected impact of the Education for Employment Program on local economic development and job creation

4. Mission. The local (or regional) Business and Education Partnership Council reviews community needs and regional, state, and national labor market information. Based upon this review, what goals and objectives have the local district established as priorities when implementing education for employment?

5. Program Access. Describe how the district's plan provides access for K-12 students to the appropriate components of education for employment. (If curriculum guides specifically highlight where education for employment objectives are being met, districts may reference the guides rather than providing separate narrative.)

   - **Practical application of basic skills.** Describe how the district's K-12 curriculum writing and review process insures that K-12 students apply the basic skills learned in the general and vocational curricula to real world-of-work situations.
   - **Career exploration, planning, and decision making.** Describe how the district's guidance and counseling plan addresses K-12 student needs and sex-role stereotyping through a developmental process.
   - **Employability skills and attitudes.** Describe how the K-12 curriculum and/or separate courses and the district's attendance, homework, graduation, and disciplinary policies unite to insure that all K-12 students master, and are reinforced in, employability skills and attitudes.
   - **School-supervised work experiences.** Describe how the district's K-12 educational program has incorporated "work experience" methodology at the elementary, middle, and high school levels to reinforce employability skills; teach work maturity skills; and provide for job exploration experiences. In-school simulations and community field experiences may be used in lieu of paid work experience.
   - **Knowledge of business operations and economics.** Describe how the study of the practical application of economics and American economic institutions, including entrepreneurship, business operations, and labor, is infused in the K-12 curriculum or how separate courses provide K-12 pupil access.

6. Vocational Programs. Are vocational programs based on labor market information and student follow-up studies? Does course scheduling allow 9-12 access to the vocational education program? (If a district submits a vocational education plan to the Bureau of Vocational Education, they do not need to address this section in the Education for Employment Plan. Instead, just indicate that a vocational education plan is on file with the Bureau of Vocational Education.)

7. Other Educational Program Requirements. Describe how the Education for Employment Program is integrated into other education programs such as School District Standards s.121.02(1), Wis. Stats.; High School Graduation Standards (p), Curriculum Plan (k), Regular Instruction (L), Children At Risk (n), Gifted and Talented (t), Staff Development (b), and Guidance and Counseling Services (e).

8. Coordination. Describe how the Education for Employment Program has been coordinated with other public schools; cooperative educational service agencies; vocational, technical, and adult education systems; universities; and other local, county, regional, and state job-training programs.

9. Incremental Steps. Define timelines (using a five-year cycle) to be used in implementing the Education for Employment Plan.

Meeting Education for Employment Standards

Standard (m)

The Education for Employment Standard—Standard (m)—requires all school districts to provide all students, throughout their education, access to classes and programs designed to prepare them for employment. In its entirety, it reads, "Each school board shall provide access to an education for employment program that has been approved by the state superintendent." (s. 121.02(1), Wis. Stats.) The resulting education for employment initiative is designed to provide each student with both the skills needed for productive entry into the work force and the academic knowledge needed for further education and training. Education for employment refocuses the mission of public elementary and secondary education by recognizing the key role education plays in economic development. The initiative takes a broader and more comprehensive view of education's role in economic development and would use federal, state, and local funds to meet the future job-training needs of Wisconsin.

Chart 2

Meeting Standard (m)

Requirement	Example of Documentation
Appoint an education for employment council or form a consortium agreement whereby -one-half of the members are business/industry representatives and -other members include teachers, administrators, pupil services personnel, board members, pupils, parents, representatives of organized labor, representatives of job training partnership councils, and representatives of district vocational and technical institutes or colleges. The council shall be representative of the population in the district or region, including females, minorities, and disabled persons.	• List of council members with the group they represent (A representative sample of members other than business/industry representatives may be used rather than one from each category. However, one-half of the members must be business or industry people.)
Prepare an education for employment plan by September 1, 1989, which was developed by the council and approved by the board. -The program's long-range plan shall be defined in incremental steps. -The plan shall be based on pupil needs and interests, equality of educational opportunity, labor market information, impact on economic development and job creation, employment needs, and an evaluation of current programs and staff development needs. -The plan shall be reviewed annually by the Education for Employment Council and revised, if necessary, at least once every five years.	• Written plan
Designate a staff person to coordinate the Education for Employment Program.	• Name of person designated
Provide access to education for employment program in grades K-12 including: -instruction that provides for the practical application of basic skills in the general and vocational curriculums; -school-supervised work experience (may include community field experiences relating to work in grades K-12, more specific occupational training in grades 7 through 12, and paid work experience in grades 10 through 12); -career exploration and planning that also addresses sex-role stereotyping in career decision making; -instruction in employability skills and attitudes; and -the study of the practical application of economics and American economic institutions, including entrepreneurship education and knowledge needed to begin and operate a business.	• Copy of plan

Meeting Standard (m)

Requirement	Example of Documentation
For all pupils in grades 9 through 12, provide access to vocational education programs that have an appropriate curriculum based on labor market information that includes follow-up studies of graduates, job placement and employment needs.	• Vocational education curriculum for grades 9 through 12 • Data related to labor market information
Establish a business and education partnership council to encourage the development of business and education partnerships.	• List of council members (The Education for Employment Council may serve as the business and education partnership council.)
Integrate other educational program requirements with the Education for Employment Program, including those found in the school district standards under s. 121.02(1), Wis. Stats., vocational skills required under s. 118.01 (2)(b), Wis. Stats., high school graduation requirements under s. 118.33, Wis. Stats., and programs for children at risk under s. 118.153, Wis. Stats.	• Written plan
Submit changes in the approved plan to the state superintendent for approval at least 90 days prior to implementation.	• Copy of revised plan

Related Standards

In addition to the basic Education for Employment Standard (m), there are other Wisconsin state standards that are related to this concept. Following is a brief summary of the relevant requirements of these related standards.

Standard (b). The professional staff development plan should include opportunities to give teachers information about practical applications of basic concepts, sex-role stereotyping, employability skills and attitudes, the use of economics, and community field experiences.

Standard (e). The counseling service should provide career exploration and planning that addresses sex-role stereotyping and career decision making. A developmental guidance approach could be implemented.

Standard (k). The district curriculum plan should reflect the curricular components of the Education for Employment Program.

Standard (L). Career exploration and planning should be a required topic of regular instruction within grades 5 through 8.

Standard (n). Students identified as being "at risk" should be recognized as those most in need of basic employability skills.

Standard (o). A district performance disclosure report should include goals and objectives from the Education for Employment Plan.

Standard (p). School-supervised work experience must be a board-approved activity and should be coordinated through the Education for Employment Plan.

Standard (t). Gifted and talented students should have access to employment programming specifically suited to their needs.

Considering the Education for Employment Elements

Education for employment is based on the premise that the economic development of Wisconsin largely hinges upon the quality of the work force produced by our schools. Emphasis on the partnerships between business/industry and education is fruitful since education and business can learn a great deal from each other. Both academic and vocational preparation are vital to the successful preparation of a student for work, and only the integration of one with the other will produce the well-educated, responsible individual that the employers of Wisconsin are seeking.

Teachers can demonstrate practical applications of their subject matter, for example, or vocational teachers can concentrate on the application of basic skills like reading and writing fluently. Similarly, the entire school climate can be geared to the modeling of good work habits and attitudes. The role of the school counselor can be expected to expand to include career education and planning, as well as providing instruction in employability attitudes and skills such as getting along with other workers.

Cooperative programs that often have been the capstone to a secondary vocational program are now being suggested as alternatives for all students. Employers have indicated a predisposition to hiring students who list supervised experience on their resumes. Other types of work experience can also be beneficial to K-12 students such as in-school simulations, leadership roles in extracurricular activities, and community field experiences. Regularly scheduled student evaluations by employers add depth and credibility to any student work experience.

In any case, there is room for local initiative. Districts can tailor a program to suit local needs. Some districts may focus efforts on the K-6 area to provide a lead into the secondary years. Others may concentrate their efforts on the secondary years and the more established employment-related programs. Some school districts may add an education for employment endorsement to the graduation diploma ensuring a student's proficiency in employability skills. However districts eventually react, education for employment brings

to preparation for the world of work.

As indicated in Section 1, the seven elements of education for employment are

- business and education partnerships;
- practical application of basic skills;
- career exploration, planning, and decision making;
- employability skills and attitudes;
- school-supervised work experiences;
- knowledge of business operations and economics; and
- contemporary vocational education programs.

Of these seven elements, the first element—business and education partnerships—facilitates the infusion of the other elements into the curriculum. The next five elements are integrated through all aspects of the curriculum. The seventh element, contemporary vocational education programs, focuses on the secondary school student.

The next part of this guide gives independent treatment to each of these elements. Each section is devoted to one of the elements and gives a description of it, lists components and competencies (where appropriate) associated with the element, and concludes by presenting sample activities that can be used to enhance classroom integration of the element. The activities can be used as is or they may be modified as needed for local use. Most of them have been collected from the field; when this is the case, their source is identified.

Business and Education Partnerships 3

Business and education partnerships are defined as formal cooperative relationships between school districts and businesses that benefit and involve pupils, professional staff, businesses, and the larger community. The interests of business and education join together as schools prepare young people for life, particularly for their work life.

Education has a direct impact on employment, productivity, and the nation's ability to compete in world markets. Economically, it's in the best interest of our businesses to have our schools do the job of preparing our youth well. However, businesses nationwide have found young people ill-prepared to function in the increasingly technological world. As a result, businesses have committed significant resources to employee training. It is estimated that training, not formal education, provides the skills for two out of three jobs and that corporate training is a larger system than the entire elementary, secondary, and higher education systems put together.*

Successful partnerships promote better education, develop a better trained work force, and ultimately strengthen the entire economic system by improving communication and understanding between schools and their communities. The linkages among economic growth, work force employability, and productivity are critical to the state and nation. Together, schools and businesses can ensure that students are adequately prepared for the jobs of the future.

Successful partnerships are a two-way street. "Partnerships should be designed so that no single member provides all the assistance. The secret is to spread the workload so that many persons make some contribution. While this approach takes more time and coordination, it ensures closer collaboration."* Partnerships must go beyond corporations donating money; businesses need to be involved at the curriculum level by donating their time and expertise. Business leaders typically find they get as much as they give to partnership ventures. They often find working with young people a satisfying experience. Schools can help business understand the complexities involved in educating youth, and that they need the help of the business community in bringing relevancy to course content. Schools also need business help to ensure that students are employable, since it's business that provides future jobs.

The success of education for employment in Wisconsin will depend upon the vision and direction provided by the interaction between education and business. Education for employment is

*Anthony P. Carnevale, "The Learning Enterprise," *Training and Development Journal* 40.1, January 1986, p. 18.

*Anita G. Barber, "The Nuts and Bolts of Business/Education Partnerships," *Enterprise*, April 1984, p. 13.

only the beginning of creating innovative ways of working together to ensure an effective, caring educational system designed to benefit Wisconsin's children and thereby its economy.

Governor's Partnership Councils

The Governor's Council on Business and Education Partnerships was created during the 1985-87 legislative budget session. The Council was recommended by the Parker Project and the Yankelovich, Skelly, and White Business Climate Study done by a special committee of "Competitive Wisconsin." The committee also recommended that economic development be the primary long-term goal of the state and that establishing the Council on Business and Education Partnerships be one of the specific goals in education.

With more than half of its members from business and industry, the Council promotes greater statewide school and business partnerships and advises the state superintendent on the education for employment process. The Council views business and education cooperation as a means to further school improvement and educational reform and to establish an active role for education in the state's economic development.

Business and education councils have been a proven delivery system for joint efforts in fostering school improvement and education's role in economic development. Councils are necessary components of other education for employment legislation, and each Wisconsin school district must participate in an education for employment council. These councils are a part of the planning and evaluation process and will assume a continuing role in school improvement and the preparation of all youth for employment. Education for employment councils will review and reform the education enterprise to further define education's role in economic development and to better prepare youth for employment in Wisconsin.

Purpose

The Council advises the governor, the legislature, the vocational, technical and adult education (VTAE) board, and the state superintendent of public instruction on ways to foster business and education partnerships at the state, regional, and local level. The Council helps bring schools and businesses together to better prepare Wisconsin youth for employment and to establish the public schools' role in economic development.

Duties

Activities of the staff and Council may include

- providing technical assistance to business and education in the development and implementation of business and education partnerships;
- providing development opportunities for boards of education, administrators, and teachers;
- establishing, maintaining, and publishing program models, guidelines, and resources;
- communicating with cooperative educational service agencies (CESAs), school boards, school administrators, teachers, private industry councils, and community groups relative to business and education partnership programs;
- maintaining and fostering communication and cooperation with business, industry, labor, agriculture, and governmental agencies relative to business and education partnership programs;
- conducting and supporting research, experimentation, and innovative programs;
- reviewing experimental, innovative, and model business and education partnership programs;
- providing consultation related to laws, regulations, and policies affecting business, industry, agriculture, labor, and schools in partnerships;
- consulting with state and local officials regarding the development and implementation of federal, state, and privately funded business and education partnership proposals;

- coordinating awards and recognition programs for distinguished service and exemplary programs;
- involving federal and state agencies in matters affecting partnerships; and
- working with professional associations to promote business and education partnerships.

Local Councils

At the local level, there are some practical steps that can be taken in forming business and education partnerships (adapted from *Partnerships for Education Handbook*, Lansing, MI: Department of Education).

Awareness. The first step in starting a partnership or expanding one is to make decision makers and others within the school system, corporations, organizations, and community aware of what partnerships for education are, why they are important, and why the community should become involved. The purpose of the awareness effort is to stimulate interest in partnership involvement. Since the catalyst for a partnership may be a superintendent, a parent, a business person, a teacher, or a community leader, it is important to reach a broad target audience. Local chambers of commerce are also valuable initial links between the parties, as are service clubs and farm and retail associations. An awareness effort should include these groups whenever possible.

Needs Assessment. In order to determine what direction a partnership should take, it is important to identify the needs, interests, and resources of the schools and their current or potential partners. Educators need to know what business people are looking for and what they can contribute. Likewise, business people and community organizations need to know what they can expect from the schools.

Another phase of the needs assessment brings current or potential partners together to share their self-assessments, insights, and expertise. For example, businesses may help identify needs that the schools should address but have not considered. Educators may point out useful resources that businesses might share.

Program Goals. Once schools and their current or potential partners have jointly assessed their needs and resources, they can plan a mutually beneficial partnership. One planning approach used successfully by partnership programs around the country is to form a partnership coordinating council, steering committee, or task force. Another approach is an initial meeting between a school administrator and a business executive, followed by subsequent meetings of school and business personnel.

Whatever the initial structure, it is important to establish the direction and focus of the partnership. This requires the setting of short- and long-range goals. Setting action-orientated goals early in the partnership's development is essential.

Goals are broad statements of purpose upon which the program builds specific objectives. Goals reflect the needs assessment and the philosophy and values of the schools and their partners. The partners should understand each other's goals and build partnership goals and objectives that are mutually beneficial. School goals, for example, may include

- to increase student achievement levels;
- to motivate students to stay in school;
- to expand business and community involvement; and/or
- to improve the quality, productivity, and effectiveness of public education.

Business or community goals may include

- to improve the company image in the community,
- to expose students to the meaning and values of the free enterprise system,
- to provide retirees the opportunity to remain identified with the company, and/or
- to improve the quality of education of persons joining the company in entry-level positions.

Many partnerships propose concrete goals initially, in order to produce visible results and enhance their credibility. Other partnerships emphasize a vision of the future. Maintaining a delicate balance between tangible, short-range goals and more visionary, long-range goals ap-

pears important to building partnerships that will last and bring about substantial change.

Program Objectives. Objectives are derived from overall partnership goals and address identified needs. These may include the needs of the corporate partners, their employees, the school system, its students, teachers, administrators, parents, or community members.

Objectives are statements of specific intent. They specify what the partnership will actually accomplish. They should always be stated in specific, measurable terms; have a deadline; and assign responsibility. They form the basis for partnership evaluation.

Potential Resources. This step involves the building of a pool of people and a bank of material resources for use in the partnership. (See Appendix F for ideas.) Questions to ask include

- What resources are available within the community to help meet the objectives of the program?
- What might be available outside the community?
- How can these resources best be acquired?
- Who might have an interest in helping?

Program Design. This step consists of three activities.

- Analyze key elements. Before designing their own partnership program, partners should investigate a number of model programs they might adopt or adapt to their particular needs and goals. (Some of these also are listed in Appendix F.) These can provide valuable insights, ideas, and guidance as partners work together to design new partnerships or expand already existing ones.
- Identify administrative procedures. Some administrative procedures are needed to safeguard partnership programs. These include such matters as maintaining information files, assigning work space, preparing agendas and minutes, coordinating, and identifying decision-making channels and chains of command.
- Write role descriptions. Successful partnerships spell out in writing the roles and responsibilities of each group of people involved in the program—partnership coordinators, school district staff, principals, teachers, parents, students, business and community volunteers. Role descriptions should be developed with the consensus of the groups involved in the partnership so that each will be aware of what is expected.

Recruitment. Partnerships need a strong recruitment component to ensure adequate volunteers for partnership activities. Most effective and lasting partnerships begin with the systematic involvement of influential school, business, and community representatives. They usually

- start with small, manageable partnership activities that will be successful and build the size and scope of the program gradually;
- look for partners with the skills to match partnership needs and approach them individually; and
- reassess the partnership program if recruitment is a perpetual problem to identify weaknesses. (Perhaps there were insufficient awareness activities, a lack of involvement of influential people, or an absence of sufficient appreciation and recognition.)

The best recruiter of new partners is an enthusiastic current partner. Partners become more committed when they feel that their suggestions and recommendations are taken seriously in planning and managing the partnership.

Orientation. An orientation helps the various members of the partnership become more familiar with each other and the program. Many partnerships recommend tours and orientations at each other's facilities. A typical orientation includes introductions, information about the partner, a brief history and description of the partnership, and a tour of the partner's facilities.

Training. Training consists of short-term, focused, practical, and specific instruction to enable the partners to carry out partnership responsibilities. Training is often recommended not only for the business or community volunteers, but also for the educators involved in the partnership program.

Assignment. It is important to match avail-

able partners with the right partnership activities. This assigning of resources can be guided by the results of an interview or survey that determines a partner's preferences, interest, abilities, and resources. Newspapers are often matched with high school journalism classes or with the school yearbook. Realtors often prefer to assist with consumer education and life management skills. Some businesses, however, are matched with the nearest school buildings in order to cut down on transportation time and costs for the business volunteers. When making assignments, the following questions should be considered:

- Can the potential partner provide the services needed?
- Does the applicant have a good attitude and philosophy toward the partnership program?
- Will a partnership with this business or organization have more advantages than liabilities?
- Will the potential partner derive satisfaction from the partnership program to which it will be assigned?

Retention. Retention is the art of keeping partners involved with school improvement year after year. Partnership programs usually retain their partners and attract new ones if they

- train school personnel to work with business and community partners,
- show the partners concrete evidence of how they have made a difference in the schools,
- allow the partners to have a variety of responsibilities and contact with different people, and
- let the partners know that they are appreciated.

Recognition. Successful partnerships consider recognition a key element in keeping the partners involved. They create opportunities to privately and publicly acknowledge the value of each partner's contribution. This reinforces the feeling that each individual is appreciated. Some effective ways of giving public recognition include

- an annual report summarizing the contributions made by the partners;
- frequent feature articles and letters to the editor of the local newspaper;
- plaques, certificates, lapel pins, or other tokens of appreciation;
- teas, coffees, luncheons, or banquets;
- nominations for awards at local, state, and national levels; and
- letters of commendation and appreciation to the partner's supervisor.

Evaluation. Evaluation collects and analyzes information to determine the accomplishments, strengths, and weaknesses of the partnership program. It is a useful tool to improve the program, justify continuation or expansion, gain additional community support, and facilitate future planning.

Good evaluation is involved at the beginning, the middle, and the end of the partnership plan. In the planning stages, it helps ensure measurable and practical objectives. During the course of the program, it can alert the partners to any changes that should be made. At the end, it will show how successful the partnership has been and can help in the revision of the old plan or development of a new one for any subsequent programs.

Information often collected in partnership evaluations includes the number of volunteers in the program; the number of hours served; the attitudes of students, teachers, administrators, and volunteers; student absenteeism; and student achievement levels. Good evaluation reports contain recommendations for program planning and modifications to be considered by school administrators and their business or community partners.

Components of Business and Education Partnerships

- An advisory council of local business representatives, community leaders, and school personnel is responsible for creating and maintaining partnerships.

- Staff development activities are designed to enhance the awareness of school staff and teachers about the need, methods, and means for integrating the business/education partnership concept into all phases of curriculum; to bring private industry personnel into the schools so they can better understand what the schools do; and to provide individual teachers with private/public sector job site experience.
- Resources, both equipment and personnel, are shared so that each partner benefits.
- Planning, implementation, funding, and evaluation of projects, programs, and services are conducted cooperatively and collaboratively and are based on measurable and agreed upon objectives.
- Partnership activities enhance economic development and job retention/creation in the local labor market.
- Partnership activities further school improvement and educational reform.

Partnership Examples

Types of Partnership Projects

- Work experience
- Job shadowing
- Career fairs
- Plant and office tours
- Work simulation
- Equipment loan, donation, or purchase
- Business speakers
- Adopt-a-school programs
- Advisory committees with business representatives
- Career exploration programs
- Co-op programs
- Field trips
- Job-seeking skill information
- Job-keeping information
- Classroom instruction by business people
- Job counseling in the field
- Educational liaison departments
- School staff on business development committees
- Teachers working in business, industry, or government
- Teachers providing services and expertise for business or industry

Opportunities from Partnerships

- Share knowledge.
- Enhance the understanding of roles and abilities.
- Use factories and workplaces as classrooms.
- Provide teachers with business work experience.
- Share and exchange human resources—help to solve administrative problems.
- Improve student understanding of business roles.
- Provide part-time employment (internships, on-the-job training) for students.
- Sponsor continuing education programs for teachers.
- Fund grants for curriculum development.
- Serve on curriculum advisory committees.
- Develop a work force pool through job-oriented classes.
- Develop an awareness of opportunities for females and minorities.
- Develop realistic experimental exercises at the elementary and middle school level.
- Provide needs assessment seminars related to business and education.
- Provide technology seminars.
- Provide tax incentives for businesses to develop partnerships.
- Use schools for retraining business employees.
- Support student organizations.
- Support business and education partnership programs such as inventorships, business worlds (locally), cooperative education, and adopt-a-school or adopt-a-class programs.

Sample Partnerships

- A bank working with an elementary classroom to set up a bank simulation unit
- An "adopt-a-school" program in which a business works with schools on curriculum, placement, public relations, and resources to enhance attitudes, skills, and knowledge necessary for success in the specific business fields
- A radio or television station providing equipment, experience, and curriculum in media
- Cash awards for teachers judged to be excellent in providing skills to students
- Paid internships for students to learn the operation of a business
- A newspaper providing journalistic opportunities and speakers for career roundtables
- Business-sponsored essay or poster contests stressing business needs and concerns
- Providing professional development or a salary for teachers to implement business-specific curriculum
- Using community business equipment to print or reproduce school newspapers or documents
- Businesses donating space and equipment for science fairs or other activities
- Cooperative development of a nature park or arboretum on company or school land
- Law firms supporting instruction in judicial proceedings, helping with mock courts, and coordinating court visits
- Art students and/or teachers assisting in logo development for a small business
- Business and/or English teachers and/or classes assisting in writing or editing manuals for businesses

■ Sample Partnership Activity

Reading Incentive (K-12)

Purposes: Communities will

- develop ongoing communication and a mutual understanding between business/industry and school;
- foster cooperation between the business and educational communities to develop activities that will promote learning activities for children; and
- exchange information, resources, and talent.

(Large corporations frequently realize that an investment in the schools is an investment in their future work force. Following is an example, taken from the April 1987 issue of the *American School Board Journal*, of a corporate partnership. Other corporate partnerships are described in Appendix F.)

Pizza Hut's national reading incentive program, *Book It!*, uses two powerful rewards—food and recognition—to motivate students to read more books. If your students need help in reading and like pizza (and who doesn't?), this could be an important program for you.

The program is working so well in Allentown, Pennsylvania, for instance, that students and staff members of the Parkland school system hosted a "Pizza Hut Appreciation Day" to thank the company for its commitment to education. "The kids called it 'Book Feast,' probably because they eagerly ate up the books *and* the pizza over the last five months," says Charles Klein, principal of Allentown's Cetronia Elementary School.

The *Book It!* program, aimed at improving students' reading habits and increasing their comprehension, recently ended its second year. Company officials say it has reached nearly 12 million students in 400,000 classrooms across the country; so far, Pizza Hut estimates it has spent $27 million on the program in product and administrative costs. The company says it is prepared to spend as much or more when the program begins its third year in October. Pizza Hut wants to increase the number of participating students to 12.5 million—nearly half of the nation's elementary school students—and to increase the level of participation in those schools already involved.

Book It! works this way: Each month for five months, teachers set minimum extracurricular reading goals, either for individuals or for groups. Students produce oral or written book reports, and the teacher notes their progress.

Students who read enough to meet the minimum monthly goals earn a free "personal pan pizza" at Pizza Hut. Those who achieve the reading goals in all five months earn a Principal's Honor Diploma. If all the students in a class reach their goals for four out of the five months, the whole class gets a free pizza party from the restaurant.

The company says the program works because it rewards children's efforts, not just their ability.

Teachers are permitted to set more modest goals for slower readers. The program also builds good study habits, encourages team spirit, emphasizes the value of teamwork, and teaches children the meaning of living up to their commitments.

Pizza Hut hired a researcher, John Boulmetis of the University of Rhode Island's Institute of Human Science and Services, to survey teachers who have used the *Book It!* program. The final report is not yet available, but preliminary findings suggest the program motivates students to read more. "The average number of books read per student increased by more than 300 percent," the preliminary findings show. "Reading levels improved for 52.6 percent of the students." Additionally, the survey found students actually began to *like* reading. "Reading enjoyment improved for 77.5 percent of the students," according to the preliminary report. (For more information, contact: Pizza Hut, P.O. Box 2999, Wichita, KS 67201, 800/4-Book-It.)

Majestic Project (Elementary)

Purposes: Communities will

- exchange information, resources, and talent for the betterment of the community;
- develop a better understanding of how schools and business can work together to form a stronger community; and
- promote and improve relationships between business and education.

In Janesville, Wisconsin, an elementary school developed the land next door into a park with the help of local businesses. This activity goes beyond businesses donating money or "adopting a school." People from business got involved at the curriculum level by donating their time and expertise. Landscape architects worked with children, having them draw up designs and explaining topographical studies and other technical details. The cement workers that poured cement (for the footings of a sculpture that was installed) had involved children using practical math skills to estimate how much cement was needed. The children learned about planning, frost lines, and teamwork. The children originally estimated the job would take one-and-a-half hours. Instead, they learned that doing it right took one-and-a-half days. (Southern Wisconsin Education for Employment Project, 527 South Franklin Street, Janesville, WI 53545-4899.)

Sample Partnership Activity

Value of Volunteers (Elementary/Middle)

Purposes: Communities will

- assist youth in identifying career interests and preferences through exploration of volunteer work,
- enable youth to explore the value volunteer work provides both society and the worker,
- demonstrate how volunteer work can assist youth in finding a job, and
- identify school and community organizations that need volunteers.

Brainstorm with the class the kinds of adult volunteer work that happen within their community. Some starters may be the volunteer fire department, aides in schools, deliveries of "Meals on Wheels," scout leaders, Rotary, Jaycees, League of Women Voters, Chamber of Commerce, Big Brothers/Sisters, Red Cross, and Goodwill Industries.

After listing the many ideas, discuss what the different groups do. Then ask the class to pick out one group of particular interest. Have a representative come to the class to discuss why they joined the group and what they do. (Adapted from Watertown School District Guidance Department, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Interviewing Workers (Middle)

Purposes: Communities will

- acquaint students with different career opportunities,
- help students understand the depth and variety inherent in all career choices,
- assist students in the development of interviewing skills, and
- promote students' learning about work and the way it will fit into their lives.

There are many people who can put students in touch with others who are already in careers they are thinking about, including families, youth group leaders, teachers, and alumni. Students don't have to wait until they are choosing a college major or hunting for a job to begin exploring careers. The more experience they have talking with people in work that interests them, the more background they will have for their own decisions. If a student wants to sell securities, talking to a stockbroker about what it's like to be in this field is one of the best ways to learn. How much of the job is really rewarding and how much is distasteful? Will they enjoy the hustle and competition of the sales atmosphere?

After students have the names of people to contact, they should call, explain their interest, and ask for an interview. They should say they would like a specific amount of time, so that the workers won't think the student will keep them too long from their work. Most people enjoy talking about themselves if the interview does not take more than half an hour. To be sure to get interesting and helpful information, have the students prepare a list of questions to take with them.

- What is your job title?
- What tasks do you spend most of your time doing?
- What is the educational background required?
- What are the main skills or competencies you need?
- What are the main personality traits required?
- Why did you decide to become a _____?
- What are some advantages of your job?
- What job can you move to that has more responsibility and pay?
- Is there much competition for a job like yours?
- Are you paid on a salary or a free-lance basis? How does your income compare with that of people who do similar work in other parts of the country? What are the salary ranges and how do you get increases in salary? (Do not ask, "How much do you earn?")
- What leisure opportunities are available to you? How does your job affect them?
- Are there any social roles and/or social demands connected with your job? What are they and are they an advantage or disadvantage on the job?
- How much does your job determine what the rest of your life is like?

After the interview, the student should prepare a short thank-you note to the interviewee for both the time granted and the sharing of work information. (Adapted from Watertown School District Guidance Department, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Sample Partnership Activity

Commercial Art/Outdoor Advertising (Secondary)

Purposes: Communities will

- reinforce basic academic skills of reading, writing, and mathematics; and
- introduce students to the requirements of outdoor advertising.

Gannett Outdoor Advertising Company in Washington, D.C., used their professional expertise to instruct juniors and seniors in the high school's commercial arts class. Designing an appropriate billboard advertisement for the League of Women Voters was the learning project. The following procedures were used:

- Commercial arts teachers and partnership coordinators toured the Gannett facilities and drew up preliminary outlines for program sessions.
- Advertising employees visited commercial arts classes to present information and lead discussions in curricular subjects.
- Students toured Gannett facilities to get ideas for their project designs.
- Members of the League of Women Voters visited classes to discuss the history, purpose, and function of their organization.
- The art director of Gannett visited classes to assist with student designs.
- Final project designs were judged by Gannett employees.

(Adapted from Cynthia W. Shelton, *The Doable Dozen: A Checklist of Practical Ideas for School-Business Partnerships* [Alexandria, VA: National Community Education Association, 1987], p. 68.)

Providing Job Opportunities (Secondary)

Purposes: Communities will

- expose students to career opportunities with a company,
- provide summer jobs for teenagers, and
- help students develop job seeking skills.

Seiko Time Corporation recruits and hires high school students during the summer, which is the peak time for watch assembly. To reciprocate, industrial education students at the school have constructed trays to hold watch parts on the assembly line. Following are the procedures used for this activity:

- Counselors, principals, and teachers recommend students to participate in the internship program.
- Students fill out company applications.
- Seiko Time Corporation staff review the applications and interview 30 to 40 candidates.
- Following the interview process, 20 students are hired for the summer.
- Graduates of the high school also are hired, some for full-time positions. This procedure follows classroom discussions, aided by Seiko personnel, on filling out job applications and desirable interviewing behavior.

(Adapted from Cynthia W. Shelton, *The Doable Dozen: A Checklist of Practical Ideas for School-Business Partnerships* [Alexandria, VA: National Community Education Association, 1987], p. 72.)

Practical Application of Basic Skills

The *practical application of basic skills* refers to applying and reinforcing instruction in the basic communicative, quantitative, and cognitive processes in all courses by using examples from the world of work. One of the goals of education for employment is to reemphasize the basics for all K-12 students. A paper prepared by the College Entrance Examination Board, *Academic Preparation for the World of Work*, begins, "Academic preparation is not just for the college bound. Students who enter the work force directly from high school need many of the same academic competencies as do those going on to college .... Business leaders point out that high quality academic preparation for all students is more important now than at any other time in our nation's history." (NY: College Board Publications, 1984) Students need academic competencies not only to enter the work force, but to succeed and advance in their chosen profession.

Education for employment seeks to help students understand the relationship between basic skills and how these skills are used in the employment world. Students have not always made the connection between the need for a reading, mathematics, or thinking skill and successful competition in the work place.

The identification of specific skills and competencies that workers will require is a difficult task because business and industry are changing so rapidly. As equipment and even jobs become obsolete or are redefined by fast-changing technology, employees must be able to shift and change. Everyone must master the lifelong skill of learning how to learn. Other key basic skills for the future are broad, transferable skills such as communications, problem-solving, and decision making. These need to be emphasized in science, mathematics, reading, language arts, and social studies. At the same time, integrating basic skills into vocational programs is a desirable, appropriate way to help students master these skills.

The true meaning of the practical application of basic skills in education for employment is not so much to define competencies as to provide relevance for the competencies by providing students an understanding of *why* they are learning and how their knowledge will be applied in their future roles in employment and society.

Components of the Integration of Basic Skills

- Staff development activities are designed to assist K-12 teachers and business/community representatives integrate
  - basic skills into the vocational curriculum,
  - world of work examples and competencies into the general education curriculum, and
  - activities across grade levels and disciplines with special regard for student populations with unique learning needs.

- Processes are established to evaluate the success of the total K-12 curriculum in promoting post-high school transition for students into the world of work and/or further education.
- Career exploration, planning, and guidance activities are integrated and reinforced districtwide.

Competencies

In its report, *Action for Excellence: A Comprehensive Plan to Improve Our Nation's Schools* (Denver, CO: Education Commission of the States, 1983), the national Task Force on Education for Economic Growth identified competencies the school program should help students develop. The competencies were based heavily on work done by The Center for Public Resources and Project Equality of the College Board.

Reading Competencies

- Identify and comprehend the main and subordinate ideas in a written work and to summarize the ideas in one's own words.
- Recognize different purposes and methods of writing, identify a writer's point of view and tone, and interpret a writer's meaning inferentially as well as literally.
- Vary one's reading speed and method and one's purpose for reading according to the type of material.
- Use the features of printed material, such as a table of contents, preface, introduction, titles and subtitles, index, glossary, appendix, and bibliography.
- Define unfamiliar words by decoding, using contextual clues, or using a dictionary.

Writing Competencies

- Recognize, select, and relate ideas and outline and develop them in coherent paragraphs.
- Write sentences with correct sentence structure, verb forms, punctuation, capitalization, possessives, plural forms, other matters of mechanics, word choice, and spelling.
- Improve one's own writing by restructuring, correcting errors, and rewriting.
- Gather information from primary and secondary sources; write a report using this research; quote, paraphrase, and summarize accurately; and cite sources properly.

Speaking and Listening Competencies

- Engage critically and constructively in the exchange of ideas.
- Answer and ask questions coherently and concisely and follow spoken instructions.
- Identify and comprehend the main and subordinate ideas in discussions and report accurately what others have said.
- Conceive and develop ideas about a topic for the purpose of speaking to a group, choose and organize related ideas, present them clearly.

Reasoning Competencies

- Identify and formulate problems and propose and evaluate ways to solve them.
- Recognize and use inductive and deductive reasoning and recognize fallacies in reasoning.
- Draw reasonable conclusions from information found in various sources, whether written, spoken, tabular, or graphic, and defend one's conclusions rationally.
- Comprehend, develop, and use concepts and generalizations.
- Distinguish between fact and opinion.

Basic Employment Competencies

- Be willing to assume the responsibilities of a good citizen.
- Engage in interpersonal relationships.
- Cope with requirements concerning attendance and punctuality.

Economic Competencies

- Understand personal economics and its relationship to skills required for employment and promotability.
- Understand this country's basic economic system (profits, revenues, law of supply and demand, and so on).

Computer Literacy Competencies

- Follow predefined procedures and understand when a procedure is completed successfully and when it is not.
- Operate equipment that requires understanding of a predefined procedure and know when operator action is required.
- Recognize when a predefined procedure is in a special state and identify the source of assistance.
- Understand the basic functions of a computer device (terminal, CRT, and so on).

Mathematical Competencies

- Perform the computations of addition, subtraction, multiplication, and division using natural numbers, fractions, decimals, and integers.
- Make and use measurements in both traditional and metric units.
- Use effectively the mathematics of integers, fractions and decimals, ratios, proportions and percentages, roots and powers, algebra, and geometry.
- Make estimates and approximations, and judge the reasonableness of a result.
- Use elementary concepts of probability and statistics.

Scientific Competencies

- Understand the basic principles of mechanics, physics, and chemistry.
- Distinguish problems whose genesis is in basic mechanics, physics, or chemistry.
- Apply basic scientific/technical solutions to appropriate problems.

■ Sample Basic Skills Activity

Communication (Elementary)

Purposes: Students will

- develop skills in oral expression, and
- learn to introduce themselves to a new group.

The teacher models this activity by bringing a bag of personal items and explaining why each item is important. Each student is then asked to bring a bag of personal items to share with the class. Students are encouraged to express themselves with complete thoughts. It is also explained to students that there is "risk-taking" involved in sharing the items and personal information about themselves. (Southern Wisconsin Education for Employment Project, 527 South Franklin Street, Janesville, WI 53545-4899.)

Additional ideas.

- Which interests are similar—could some relate to future careers?
- Select the most unique or different items—tell why.
- Each student makes a picture of one of their personal items and puts it on the outside of a bag.

Critical Thinking (Elementary)

rposes: Students will

- develop thinking skills,
- demonstrate creativity,
- learn to ask appropriate questions,
- develop leadership skills,
- identify needed information, and
- develop oral expression skills.

Prepare 50 index cards with pictures of objects on them. Old magazines and catalogs can be used for the pictures. Sample objects are animals, household furnishings, and articles of clothing. One child starts as the leader. He or she picks five cards and places them in a spot where all children in the class can see them. The leader selects one card to be the "answer," but does not tell the group. The class is allowed to ask the leader three questions that can be answered with a "yes" or "no" answer. After three questions are asked, the leader calls on someone in the class to guess which card was selected. If the person called on answers correctly, he or she becomes the leader. If the person called on answers incorrectly, the leader picks five new cards and the game begins again. (Adapted from Southern Wisconsin Education for Employment Project, 527 South Franklin Street, Janesville, WI 53545-4899.)

Sample Basic Skills Activity

Mathematics (Elementary)

Purposes: Students will

- understand U.S. currency,
- reinforce basic adding and subtracting skills,
- learn to estimate costs,
- develop an awareness of a business operation,
- learn how basic skills are used on the job, and
- learn the types of skills and attitudes employers want their employees to possess.

Students bring empty food containers from home to be placed in a classroom store. Prices are attached to the food items. One child is chosen as the store clerk. The remaining members of the class are the consumers. Each consumer is given $5 worth of toy coins and dollar bills. The consumer is to select three items from the store and estimate their total cost to determine if they have enough money to buy the three items. Then, the consumer adds the total cost of the food items on a sheet of paper. If the consumer has enough money to purchase the three items, the student will decide which coins or bills will be needed to pay for the items. Consumers not having enough money will return the items and select three items they believe they will have enough money to buy. The items and money are given to the store clerk to be checked with a calculator. The store clerk determines the amount of change necessary and gives it to the consumer.

As a follow-up to this activity, students could visit a grocery store and have the owner explain to them the types of jobs available in the grocery business, how employees use basic skills in their jobs, what skills and characteristics are important for workers, and what types of changes are expected in the grocery business in the future. (Adapted from Johnson Creek elementary mathematics curriculum, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Art (Middle)

Purposes: Students will

- develop knowledge and understanding of how one particular artist (Norman Rockwell) presented a social commentary on careers of a certain time period through visual arts;
- develop knowledge and understanding of how social mores, values, and ethics related to careers have changed or not changed since the time Norman Rockwell presented his work;
- develop knowledge and understanding of changes in the types of careers that may be presented in an artist's work today or in the future; and
- describe, interpret, and analyze the significance of the career representations of Norman Rockwell within their historical and social context and their relationship to past, present, and future opportunities.

The art work of Norman Rockwell illustrates the artist's portrayal of a given culture at a point in time. His work can be used to illuminate the lifestyle and traditions of the American people between the years 1915 to 1960. Teachers can lead discussions to acquaint students with different occupational/career aspects of the American culture during that time period. Through Rockwell's presentations of occupations/careers, students can gain understanding of how art can be used to communicate an artist's idea and to reflect various aspects of culture.

The visual arts offers a means to communicate not only aesthetics, but also personal social values, morals, and ethics related to past, present, and future traditional and nontraditional careers. Students may identify and describe changes in careers that today or in the future may be presented through the work of artists—types, location, numbers, skills needed, relationship to past and/or present. Students can also be asked to present a report orally or in writing contrasting present and future careers. Business people or labor market specialists can be recruited to present data concerning future career opportunities. (Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Following is a list of artwork that may be used as a springboard for this activity. (Use as pictures, or make posters, transparencies, or slides.) All of the works by Norman Rockwell appeared as covers for *Saturday Evening Post* magazine, on the date specified in parenthesis, unless otherwise noted. All of these works can be found in the following references:

- Guptill, Arthur L. *Norman Rockwell Illustrations*. Camarillo, CA: American Heritage Press, 1975.
- Ruechner, Thomas. *Norman Rockwell: Artist and Illustrator*. New York: Abrams Press, 1970.
- White, Jean. *Norman Rockwell Book*. Indianapolis, IN: Curtis Publishing, 1977.

Artwork

- Louie Damone
  Norman Rockwell, Photo
- Norman Rockwell
  Hometown News (April 11, 1942)
  Reminiscing (January 18, 1919)
  Rosie the Riveter (May 29, 1943)
  Hobo (October 18, 1924)
  Homecoming (September 27, 1924)
  Be a Man (April 29, 1922)
  Gramps Encounters Gramps! (December 20, 1919)
  The Old Couple (April 15, 1922)
  Heroes Welcome (February 22, 1919)
  The Tattooist (March 4, 1944)
  Freedom of Speech, Oil Poster (1943)
  Freedom of Worship, Oil Poster (1943)
  Salutation (May 20, 1916)
  No Swimming (June 4, 1921)
  Love Letter (January 17, 1920)
  The Age of Romance (November 10, 1923)
  Courting at Midnight (March 22, 1919)
  Santa on a Train (December 28, 1940)
  Santa's Helpers (December 2, 1922)
  Freedom from Want, Oil Poster (1943)
  Homecoming GI (May 26, 1945)
  Bottom Drawer (December 29, 1956)
  Gossips (January 12, 1929)
  The Full Treatment (March 18, 1940)
  The Model (May 3, 1924)
  The Clock Mender (November 3, 1924)
  Hatcheck Girl (May 3, 1941)
  Sorting Mail (February 18, 1922)
  Asleep on the Job (August 29, 1925)
  Farmer and Birds (August 18, 1923)
  Statue of Liberty (July 6, 1946)
  Triple Self-Portrait (February 13, 1960)

Mathematics (Middle)

Purposes: Students will

- understand volume as a measure of capacity,
- estimate volume,
- measure volume directly,
- measure volume indirectly, and
- see an application of volume in business.

Approximate the volume of various shoe boxes by filling them with one-centimeter cubes. Observe the relationship between area of the bottom, the height, and the volume. Look at a cube with length, width, and height all one foot. Using yard sticks construct a cube with edges one yard long. Determine the number of cubic feet in a cubic yard. Have the students estimate the volume of the classroom in terms of cubic feet. While it would be possible, theoretically, to measure the volume of the classroom by filling it with cubes, it is more convenient to measure it indirectly by determining the area of the floor (in square feet) and the height. Suggest that students visualize the room filled with cubes. Calculate how many it will take to cover the floor. Then determine how many layers are needed to reach the ceiling. (Note that tiles on the floor often provide an aid in estimating the area of the bottom and cinderblocks on walls help to estimate the height.) Determine the volume and ask whether the answer is reasonable. Imagine the classroom as a warehouse where a company stores its merchandise. The product is packed in cartons that measure one by two by three feet. How many can be stored in the warehouse? If you changed the dimensions of the cartons, what other dimensions would take up the same amount of space? If you sell 50 cartons each day, when will the warehouse be empty?

The activity can be continued by devising additional questions in which other aspects of the problem are modified. For example, suppose the warehouse were enlarged by doubling its length. What would be the effect on the number of cartons that could be stored? Suppose all dimensions were doubled. What would be the effect? Suppose that in addition to the cartons already described, the company markets another product packaged in cartons of another size. If you want to store the same number of each item, how many of each will fit in the warehouse? Suppose you know that one product sells twice as fast as the other. How many of each should be stocked?

Sample Basic Skills Activity

Literature (Secondary)

Purposes: Students will

- develop an appreciation of classical literature,
- understand the current relevance of classical literature,
- develop interviewing techniques,
- use videotaping equipment,
- analyze and interpret meanings and form corresponding conclusions, and
- prepare written summaries.

"Two years ago I blew up at yet another precocious ninth grader who interrupted my introduction to *The Merchant of Venice* by raising a hand and asking, 'Why do we have to study this stuff anyway?' "

Many teachers have faced similar questions, but this one responded to the student's question (and similar attitudes and concerns by other students) by deciding to really focus on the current relevance of this noted Shakespearian play. After viewing the play and covering the basic plot and characters, the class identified its main topics, picking "moneylending," "friendship," "love and marriage," and "prejudice." Students worked in groups of four to six, selected one of the four topics for their group, and noted what Shakespeare had to say about that topic. These notes were then discussed with the rest of the class, and other students added additional insights to the topic. Then, the groups were asked to divide into pairs and each pair was required to set up an interview with someone in the community who they felt would have insights into the nature of their particular topic in our society. Students were required to prepare and have approved a list of questions to be asked and to tape the interview. They interviewed bank managers, marriage counselors, ministers, rabbis, detectives who covered loansharking, managers of loan companies, their own parents, and so on. When the taped interview was completed, they submitted the tape and a two- to three-page summary of the major points made in the interview. Finally, returning to their groups, students compared their interview findings with the points they had previously identified as Shakespeare's views on the topic. Not one of the groups decided that the play was irrelevant for our society.

The teacher of this class was delighted with the enthusiasm of the students and others. One morning two of the least involved students were waiting at 7:45 a.m. to report what a loan manager had told them the previous afternoon. A mathematics teacher noticed students becoming interested in amortization, and one of the guidance counselors brought in a psychologist to talk with students about friendship and adolescents. A loan manager revealed that what he collected as the collateral on a bad debt depended on what he needed personally.

The students learned that even though times had changed, the characters and topics of Shakespeare's plays were as relevant today as they were years ago. Follow up activities could easily be held on business operations, economics, careers, human relations, and related topics to prompt discussions on "what is" and project what the future may bring. (John Barnes, *Notes Plus*, National Council of Teachers of English, November 1986, p. 4.)

Technology Education (Secondary)

Purposes: Students will

- use critical thinking skills;
- apply writing, reading, and communications skills to the work world;
- explore careers in television production;
- learn how basic skills are used on the job; and
- develop an awareness of a business operation.

Ask a local television station to sponsor a program designed to provide a hands-on, instructional learning experience in the area of television production. Students develop their own production for television viewing by working with technical engineers, production staff, and editors.

Students become acquainted with the television station through a welcome by the general manager, a tour of the station, and interviews with employees describing their jobs. Next, a television producer stimulates the students' scriptwriting task with a brainstorming session and advises students on how to generate and organize ideas and produce a quality product for television. One group of students writes scripts; another group addresses the technical aspects of a television production and learns the responsibilities of a director. After the scripts are edited by teachers and students, rehearsals begin and scripts are revised according to the critiques. Skits are taped live at the station and appear on TV monitors for station viewing. Students in the technical group familiarize themselves with the control room. (Adapted from Cynthia W. Shelton, *The Doable Dozen: A Checklist of Practical Ideas for School-Business Partnerships* [Alexandria, VA: National Community Education Association, 1987], p. 62.)

Career Exploration, Planning, and Decision Making

5

Career exploration, planning, and decision making is the process by which elementary and secondary pupils identify and evaluate life and work choices, explore and plan career goals, and acquire realistic decision-making skills. While most employers are willing to provide some on-the-job training, few want new employees to use a job in their firm as a career exploration experience. School counselors have established guidance programs to assist students in preparing and planning for postsecondary educational opportunities and often help students learn about careers, apprenticeships, local labor market needs, community job requirements, job-seeking and application skills, and general employment skill development. Education for employment will provide a framework for K-12 career exploration, planning, and decision making through a curriculum and program that systematically and comprehensively stresses developmental stages of career awareness.

The competency-based Wisconsin Developmental Guidance Model has been developed to assist all school districts in improving, strengthening, and expanding career guidance programs. Using this model, career development becomes an integrated part of the school curriculum and classroom programming. All students will have an assessment of personal interests and abilities, and opportunities to develop personal career goals, consider realistic career choices, and become knowledgeable about local, regional, and state labor market opportunities and needs.

Because career choice is a process and not an event, the need for career exploration and planning as a K-12 activity is clear. School response in this area must begin early and follow through to graduation from high school. Eventual career choice is part of the *total* developmental process. The questions, "What sort of person am I?", "What do I want to be when I grow up?", and "What can I really do with my life?" are the beginning of the career exploration and planning component of education for employment.

A career exploration and planning program must be developmentally based in order for it to be meaningful. Coupling a knowledge of their own interests, abilities, aptitudes, and attitudes with information about the realities of the world of work, current labor market information, nontraditional career opportunities, job hunting skills, and educational opportunities provides students a sound base for choosing a future occupation.

If a program developed by a school district is based on the student competencies of the Wisconsin model, then a district can be assured the approach is sound from a developmental point of view. The model suggests that an organizational structure be established that will incorporate the resources of counselors, pupil service personnel, teaching staff, administration, parents, community members, and business and industry representatives in a cohesive, programmatic response.

Components of Career Exploration, Planning, and Decision Making

- Students are taught the need and the processes for evaluating their abilities, interests, aptitudes, and attitudes as they make career decisions.
- Socioeconomic factors affecting life/work choices are stressed.
- Deliberate emphasis is given to new, emerging and nontraditional career choices.
- School district personnel place equal emphasis on all post-high school options—occupational, vocational, and educational.
- All students have the opportunity to explore career options through planned activities such as career fairs, field trips, and work experience programs.
- The existence and historical consequences of sex-role stereotyping in employment are addressed throughout K-12.
- Follow-up studies are developed to determine the success of post-high school transition for all students and results are used to modify existing curriculums.
- A curriculum is developed for all students at the middle/junior high school level. It emphasizes appropriate activities to assist students to understand their own interests, abilities, and aptitudes. Information should be incorporated on the world of work to allow students an opportunity to set meaningful goals for the future.
- The Wisconsin Developmental Guidance Model provides a framework for integrating career exploration, planning, and guidance into the K-12 curriculum. (Copies of *School Counseling Programs: A Resource and Planning Guide*, which explains the model, are available from Publication Sales, Wisconsin Department of Public Instruction, 125 South Webster Street, P.O. Box 7841, Madison, WI 53707. For further information contact the guidance and counseling consultant at the Wisconsin Department of Public Instruction.)

Competencies

Personal Capabilities and Interests

- List special aptitudes and/or abilities.
- Identify personal interests.
- Identify career interests for future career direction.
- Identify transferable work skills/work experience.
- Identify personal traits (strengths, values).
- Assess and practice good health habits, such as weight control, good nutrition, exercise, relaxation, sleep, and having periodic physical examinations.

Career Planning

- Identify important personal and work values.
- Recognize the differences between needs/wants/values and their role in career decisions.
- Select careers or vocational goals which are consistent with interests, values, and labor market trends.
- Acquire general information about the occupational/career field.
- Identify training, education, experience, and requirements needed to pursue selected career.
- Develop short- and long-term plans to achieve goals.
- Identify motives for moving up a career ladder, such as self-fulfillment, money, recognition, desire to learn more, creativity, more authority, more responsibility, and desire to do different job tasks.

Labor Market Awareness

- Describe economic and technological trends that may affect the work environment.
- Identify ways in which employees may have to adapt to a changing work environment.

Consumer Skills

- Develop a personal budget based on estimated income to fit personal needs and wants, listing both fixed and variable expenses.
- Identify ways to balance a budget.
- Determine the cost and value of borrowing money.
- Identify important reasons for having savings.

Sample Career Education Activity

Alphabet Jobs (Elementary)

Purposes: Students will

- develop awareness of different occupations, and
- understand alphabetical order.

In this activity, students must name occupations in alphabetical order. Divide the class into two teams. The first student in each team names an occupation beginning with A, the second names an occupation beginning with B, the third names one beginning with C, and so on. If students miss, they go and sit down. When the teams have gone through the alphabet, the team with the most players left wins the game.

As the occupations are named they should be listed on the chalkboard. Upon game completion, each occupation should be discussed. Then, students should categorize the listed occupations according to clusters such as manufacturing, construction, services, government, and so forth. (Adapted from Lake Mills Area Schools, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Occupational Charades (Elementary)

Purposes: Students will

- develop knowledge and understanding of various careers/ jobs,
- research an occupation,
- develop ability to give an oral presentation, and
- develop self-confidence in front of a group.

Students act out various occupations and classmates guess the occupations. After an occupation has been identified, the student who acted out the occupation gives a short overview presentation of the occupation and explains job tasks. Students then pick the five occupations that they find most interesting as a class, and guest speakers from the community are asked to come to the classroom and give a more in-depth description of the occupations selected. (Adapted from Lake Mills Area Schools, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Sample Career Education Activity

Community Goods and Services (Middle)

Purposes: Students will

- identify goods and services provided by the businesses of the community;
- identify how local businesses meet the needs and wants of people in the community; and
- identify types of community jobs and/or careers including the educational skills needed, salaries, and potential for future growth.

Black-and-white photographs of community businesses will be displayed on a chart that can be expanded throughout the school year. Pairs of students will select a business for an in-depth study. They will call or visit the store owner or manager and research the goods and/or services available, the kinds of jobs available, the education employees need, and an approximate wage for each. The information will then be written into report format, typed, and attached to the picture. (Johnson Creek School District, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Compare and Contrast Jobs (Middle)

Purposes: Students will

- develop their ability to compare and contrast,
- learn to ask appropriate questions,
- understand the changing nature of jobs and the need to develop attitudes of flexibility and adaptability, and
- develop an understanding of the need for continued learning through both schooling and independent efforts.

Organize students into interview teams designed to research the present and past of specific occupations. The students will compare and contrast job skills and expectations, equipment, clothing, training, and working conditions. Students should design a form to use for notes while conducting the interviews, and a standard form should be adopted by the class. The teacher should work with each team to design questions to be asked during the interviews. Workers with similar roles in the past (20 to 40 years ago) and present are invited to come to the classroom for the students to interview. (An alternative would be to interview older workers in a senior citizen center or nursing home.)

After the interviews are conducted, each student is asked to select one occupational area to research and to prepare a two- to three-page paper on the future projections for that occupation. (Adapted from "Neat Ideas to Teach Communication," Southern Wisconsin Education for Employment Project, 527 South Franklin Street, Janesville, WI 53545-4899.)

Sample Career Education Activity

Career Fair (Secondary)

Purposes: Students will

- learn aptitudes and responsibilities as related to possible careers,
- assess potential career choices, and
- be exposed to educational information rega ding career choices.

Employers and employees from a wide variety of career fields are invited to provide information about job descriptions, entry-level positions, education and training requirements, working conditions, and opportunities for advancement on a designated day with students selecting and attending several career presentations.

Following are typical career and/or career area options:

Agribusiness

Agricultural Sales
Equine Management
Farm Operator
Florist/Greenhouse Operator
Landscaper

Banking and Finance

Auditor
Loan Officer
Personal Banker
Stockbroker
Teller

Communications and Media

Advertising
Cable TV
Commercial Television
Graphic Arts/Printing
Newspaper Reporting
Public Relations
Radio

Community Service

Clergy
County Extension Service
Elected Official
Firefighter
Librarian
Police Officer
Social Worker

Computer Data Processing

Computer Operator
Computer Repair Person
Computer Sales (Hardware)
Computer Sales (Software)
Programmer/Analyst

Employment Services

Farmers' Union
Job Service
Job Training and Placement Center
Manpower Temporary Services
Private Agencies

Engineering

Architect
Automation Systems and Robotics
CAD Applications Analyst
Chemical Engineer
Civil Engineer
Electrical Engineer
Environmental Engineer
Industrial Engineer
Mechanical Engineer
Metallurgical Engineer

Environmental and Natural Resources

Conservationist
Environmental Lab Technician
Hazardous Waste Specialist
Meteorologist
Nuclear Power/Radiation
Wildlife Manager

Fine Arts

Artist
Curator of Performing Arts and Education
Fine Arts Administrator
Interior Designer/Decorator
Music-Instrumental
Music-Vocal
Theatre

Foods and Hospitality

Bakery
Bar Manager
Catering
Chef
Hotel/Motel Management
Institutional Food Service
Restaurant Management
Waitperson

Health

Audiologist
Biomedical Engineer
Chiropractor
Dentist/Dental Hygienist
Dietitian
Emergency Medical Technician
Health Care Administrator
Home Health Care
Housekeeping Maintenance
Medical Records Technician
Medical Technology
Nurse
Occupational Therapy
Optometrist
Pharmacist
Physician
Physical Therapist
Psychologist
Radiologic Technician
Respiratory Therapy
Speech Pathologist
Speech Therapy
Sports Medicine

Higher Education

Community College
Private College
Technical School
University

Manufacturing/Construction

- Air Conditioning and Refrigeration
- Assembler
- Carpenter
- Electrician
- Electronics Technician
- Maintenance Electrician
- Maintenance Mechanic/Millwright
- Metal Casting
- Packaging Machinery/Consumer Products
- Pattern Maker
- Plant Management/Foreman
- Plastics/Blow Molding
- Plumber
- Quality Assurance/Control
- Tool and Die Maker/Machinist
- Welding
- Woodworker

Military

- Air Force
- Army
- Coast Guard
- Marines
- National Guard
- Navy
- ROTC

Personal Services

- Child Care Services
- Cleaner/Housekeeper
- Cosmetologist
- Funeral Director
- Photographer

Recreation and Leisure Services

- Administration/Recreation Specialist
- Charter Fishing Captain
- Health and Physical Fitness Instructor
- Parks and Forestry Manager
- Scout Leader
- Sports Club Manager
- Trainer

Sales and Marketing

- Automobile Sales
- Business Development Coordinator
- Industrial Sales
- Insurance Sales
- Real Estate Sales
- Retail Sales

Teaching

- Allied Arts Teacher
- High School
- Kindergarten/Early Primary
- Middle School/Junior High School
- Postsecondary
- Teacher's Aide

Transportation/Distribution

- Motor Carrier Marketing
- Pilot
- Purchasing Manager
- Transportation/Material Management
- Travel Agent
- Terminal/Operations Management
- Truck/Bus Driver
- Waste and Hazardous Materials Handler

Job Shadowing (Secondary)

Purposes: Students will

- understand the need for employability skills on the job such as dependability, adaptability, flexibility, responsibility, and good human relations;
- make decisions related to career areas being explored;
- develop an understanding and appreciation for the value of continued learning through both schooling and independent efforts;
- achieve an in-depth awareness and understanding of interests, aptitudes, and responsibilities as related to possible careers; and
- interact with the business community.

A student takes at least one half day to work with and/or observe someone in a profession/occupation of interest to that student. Employers are called in advance to arrange dates, times, and to familiarize employers with the objectives and procedures of the program.

The purpose of job shadowing is to give students exposure to the actual working of a specific career and to familiarize the student with the daily work routine. It is desirable that the experience be interesting to the student, but it is not intended that efforts be made to glamorize the career nor is it necessary for the student to be entertained. This experience is meant to provide realistic career information that will aid the student in making career decisions to provide the student with an opportunity to have a stimulating and challenging experience away from the classroom. (Watertown Unified School District, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Following are suggested procedures:

- The students agree to do any assigned duties they are capable of handling. It is helpful if students understand how such duties fit into the overall execution of a particular career.
- Students agree to be punctual and to complete the time commitment. This is either a full day or half day whichever best suits the company.
- Each student fills out a Student Shadowing Visit Report (see sample) and returns it to the teacher. The report will be evaluated to determine how well the student functioned during the experience but will not be graded.
- It is helpful to have one individual at the worksite responsible for assigning various duties and being aware of a student's presence.
- It is beneficial for students to observe and be involved in as much of the total process as facilities, duties, and schedules allow.
- Any problems or feelings of discontent the business or students have should be relayed to the teacher as soon as possible.
- The business or industry representative agrees to fill out an evaluation (see sample) of the shadowing visit and return it to the teacher or to the district administrator's office.

Business Representative Evaluation Form
Student Job Shadowing Visit

Your Name and Title _____

Business or Industry You Represent _____

Name of Participating Student _____

Date of Visit _____

Was student properly prepared for visit? Yes _____ No _____

Was student's behavior appropriate? Yes _____ No _____

Was visit worth your time? Yes _____ No _____

Please make any comments and suggestions pertinent to the success and/or improvement of this program.

Student Shadowing Visit Report

Student's Name _____ Grade Level _____

Referring Teacher _____

Name of Company Visited _____

Address of Company Visited _____

Date and Time of Arrival _____ Departure Time _____

Name and Title of Contact Person _____

Name of Career(s) You Shadowed _____

_____

Schedule of events (what you did)

What you learned

What you enjoyed most

What you enjoyed least

Student Shadowing Visit Report (cont.)

Student's Name _____ Grade Level _____

Evaluation

Do you think the visit was worthwhile? Why?

Was the experience as expected? Explain.

Were any of your future career plans changed or reinforced by this experience?

Would you recommend this type of experience to other students? Explain why or why not.

Employability Skills and Attitudes 6

Employability skills and attitudes refers to the skills and attitudes needed to obtain and retain general employment. In the Parker Project (explained in the Introduction), Wisconsin employers identified three reasons why high school graduates and dropouts were not hired initially: lack of job-seeking competencies, poor appearance, and poor attitude toward work. In addition, poor work habits, tardiness, and undependability were identified by these employers as the characteristics most frequently leading to job loss.

Regardless of where or when a business survey is conducted, the most frequent response is that employees need employability skills—the ability to communicate and get along with others, a "work ethic," and accuracy are some examples. In the Madison (Wisconsin) area, a random survey* of 205 employers was conducted to determine the technical skills and personal characteristics employers felt were most important for beginning employees. Of the 15 technical skills listed, only four were considered either important or very important by 90 percent or more of the employers. However, of the 15 personal characteristics listed, 12 were considered either important or very important by 90 percent or more of the employers: ability to work with others, ability to follow directions, confidence, cooperation, dependability, efficiency, initiative, judgment, neatness, conduct, produces quality work, and punctuality. Following are some comments from employers.

> Unfortunately many of the potential employees possessing ability and potential fail to make the most of their skills because they lack positive personal characteristics—cooperation, dependability, and a willingness to work.

> Employees need to learn more about communicating with co-workers (don't complain—talk it out!)

> I feel students should be taught to come to work on time and the importance of giving the employer a full day's work.

> I think schools should instill in their students how important it is to be conscientious about their work (quality) and let them know that the world does not owe them a living.

On the national level, a business-financed research organization surveyed about 500 human resources and public affairs executives. Their report found that recent high school graduates have trouble following orders, communicate poorly, and have poor work attitudes. One respondent said, "Business can teach new hires

*Vicki A. Poole, "Work Experience Program Can Help Develop Human Relations Skills," *Business Education Forum*, January 1985, pp. 9-10.

how to add if they have to, but they can't teach them to take their job seriously." A utility executive said there is a "basic problem convincing the high school graduates that there is an ethic of responsibility in the work place that requires that you show up for work."*

Educators often feel that classroom behavior can reflect future work attitudes, but young students will often discount the wisdom and advice of teachers. It is imperative that the business community join together with schools to promote the urgent need to develop employability skills in students. This message, when provided by employers, has potential for enormous, positive impact on youth. Education for employment seeks to make what is commonly referred to as the "work ethic" a part of the total school curriculum. By doing so, teachers, employers, community representatives, administrators, and counselors reinforce work place expectations.

Components of Employability Skills and Attitudes

- The K-12 curriculum includes specific career education units, lessons, objectives, and evaluation criteria emphasizing employability skills and attitudes.
- Work experience methodologies emphasizing employability skills and attitudes are available to all students.
- A developmental guidance model can be used to develop employment skills and attitudes.
- Private sector/school partnerships are utilized to ensure instruction in employment skills and attitudes.
- The teaching of employability skills and attitudes is part of both the vocational and general curriculum.
- The work ethic is integrated into total school policies and practices.

*"Business Finds Grads Unskilled," *Capital Times* (Madison, WI), June 27, 1984, p. 1.

Competencies

Work Ethic

- Work well without supervision.
- Exhibit reliability and dependability.
- Accept responsibility.
- Work beyond normal hours when needed.
- Show pride in work.
- Accept responsibility for own behavior.
- Show initiative.
- Conduct self in a calm and controlled manner.
- Demonstrate maturity in thoughts, actions, and deeds.
- Exhibit patience.
- Manage time efficiently and effectively.
- Display appropriate assertiveness.
- Evaluate own work.

Commitment

- Observe all organizational policies.
- Demonstrate interest and enthusiasm in the job.
- Consider work as more than a job.
- Exhibit loyalty to the organization and its employees.
- Display a desire to improve.
- Give best effort consistently and strive to please.
- Show concern for future career with the organization.
- Understand the world of work and basic economic concepts.

Communication

- Question appropriately.
- Notify supervisors of absences and reasons for absences.
- Seek help when needed.
- Demonstrate clear, effective written and oral communication skills.
- Demonstrate good listening and responding techniques.
- Develop telephone skills.

Interpersonal Relationships

- Work well with peers.
- Accept authority and supervision; work effectively with supervisor.
- Accept constructive criticism.
- Work as a team member.
- Display a friendly and cooperative spirit.
- Accept assignments pleasantly.
- Demonstrate tactfulness in difficult situations.
- Become aware of and accepting of cultural differences.
- Respect the rights and property of others .
- Display leadership qualities.
- Identify varying management styles.
- Understand self and need to accept value systems of others.

Responsibility

- Organize work and manage time efficiently.
- Exhibit accuracy, precision, and neatness in work and work habits.
- Demonstrate ability to complete assignments in a timely manner.
- Follow oral, visual, written, and multistep directions.
- Display care for tools and materials.
- Strive to improve job performance.
- Seek new assignments when time permits.
- Understand employer expectations.

Job-Seeking and -Getting Skills

- Become aware of creative potential.
- Utilize creative ability in on-the-job situations.
- Prepare job applications and resumes.
- Conduct career/job search.
- Develop job application letters.
- Demonstrate effective interviewing skills.
- Display understanding of benefits and payroll procedures.

Reasoning and Problem Solving

- Display flexibility.
- Integrate creative and innovative ideas.
- Synthesize and process job components.
- Adapt to changing demands of the job.
- Organize work and manage time efficiently.
- Reason and make objective judgments.
- Understand rules and procedures.
- Apply basic skills.

Health and Safety Habits

- Observe safety rules.
- Maintain a good work pace and production rate.
- Practice good personal hygiene.
- Dress in a well-groomed, appropriate manner.
- Recognize stress-related situations and deal with them effectively.
- Develop physical stamina and tolerance for the kind of work being done.
- Maintain good personal health.

Personal Attributes

- Develop good self-esteem and a positive self-image.
- Define personal and professional goals.
- Demonstrate emotional stability.
- Exhibit positive attitudes.
- Demonstrate self-motivation and self-management.
- Develop an understanding of motivation for work.
- Exhibit self-confidence and self-awareness.
- Display honesty in personal and work situations.

Sample Employability Skills Activity

Dependability (Elementary)

Purposes: Students will

- learn to tell time,
- understand the importance of being on time, and
- become aware that the schedules followed in school are similar to following schedules on the job.

Discuss with students how specific times determine when we do many things in school, at home, or on a job. Several clocks (with moveable hands) will be displayed on a bulletin board at a height that students can manage. Below the clocks will be signs such as "beginning of day," "morning recess," "lunch," "art," "music," "gym," "end of day." The signs and times can change each day.

Have an employer visit the classroom to discuss how following time schedules relates to the world of work and how many jobs have special times that employees need to follow, such as starting time, break time, lunch time, and ending time. The employer can also discuss how important it is for employees to be on time because of the effect it can have on his or her business, the work flow of the office, and the morale of other employees. (Johnson Creek School District, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Work Attitudes (Elementary)

Purposes: Students will

- develop an understanding of what makes a good worker, and
- associate behavior at school with behavior at work.

The teacher shows students sets of pictures showing children doing work. Children discuss which pictures show good workers and which pictures show bad workers.

Examples

Child shoveling snow off sidewalk	Child shoveling snow on sidewalk	Child watering flowers	Child watering clothes on line
Child talking nicely with another child	Child hitting another child	Child tidying up school room	Child pushing school papers on floor

An employer visits the classroom to explain that being a good worker is important to getting and keeping a job when children grow up. The teacher and students prepare a story about what makes a good worker. Students draw pictures of themselves or others being good workers. (Adapted from Lake Mills Area Schools, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

■ Sample Employability Skills Activity

Conducting a Job Search (Middle)

Purposes: Students will

- identify purpose and use of resume and cover letter,
- identify procedures for seeking a job, and
- learn to market attributes about themselves that are appropriate for specific jobs.

The teacher presents a "Help Wanted" advertisement. For example

> Help Wanted—student to do various indoor and outdoor household tasks and walk dog. Weekends—5 hours per weekend, $3.75 per hour. Write 625 Any Street, Lake Mills, WI 12345.

The teacher and class discuss what needs to be done to answer an advertisement and apply for a job.

- Letter answering advertisement—skills and attributes to be addressed
- Preparation of resume
  - -name
  - -address
  - -telephone
  - -age/grade/school
  - -work/volunteer experience
  - -honors/awards
  - -reference(s)

The teacher has students prepare a resume, using a specified format, and write a letter of application. A local business representative can visit the classroom to discuss what employers look for in job applications, resumes, and letters. If willing, the employer can critique student work and the student can then make corrections and revisions. (Adapted from Lake Mills Area Schools, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Human Relations (Middle)

Purposes: Students will

- learn importance of getting along with others on the job,
- develop positive attitudes toward others, and
- view other people in a positive manner.

Select a box for every group of four students in the classroom and place four "treats" in each box. Wrap some of the boxes in a very appealing manner with ribbons, bows, and other decorations. Wrap some of the boxes much plainer and leave some not decorated at all. Include at least one box within a box so students have to "dig" for the treat. Divide students into groups of four. Allow each group to select a box. Ask them to tell their reasons for making the selection they did. Have the students open their boxes.

Through follow-up discussion of the activity, lead students to the realization that there is good inside all of us, that there is a need to remain open minded about the outside "packages" of people, and that sometimes we have to "dig" deeper than at other times to find good in people. Have an employer visit the class to discuss the need to get along with others on the job. One way employees can learn to do this is by not judging people on their outside "packages," but by looking for the good in their coworkers. (Karen Hoeft, Sabish Junior High, Fond du Lac, WI 54935.)

Case Studies (Secondary)

Purposes: Students will

- become aware of employability skills needed for success on the job,
- interpret and analyze written case studies, and
- synthesize potential solutions to problems and select appropriate responses.

Case studies can provide interesting, realistic situations for students to read, discuss, and analyze. While analyzing and discussing problems and potential solutions, students learn characteristics of employees that are important to success on the job, reasons why good employability skills are critical for business operations, and differences in the way people perceive potential human relations problems and solutions. Students can be asked to answer questions related to case studies either in an oral or written manner. Variations of this activity could involve classroom debates or inviting personnel directors to the classroom to give their interpretations, suggested solutions, and related experiences of the case studies. The case studies given here are organized around employability traits.

Cooperation

The employer who pays your salary has a right to expect your full cooperation. This means that you will be cooperative with everyone with whom you work—your boss and everyone else with whom you come in contact on the job. One of the best ways to show your cooperation is to offer to help other employees if your duties are completed. In many companies there are certain tasks that nobody likes to do. The employee who is willing to do these tasks will make a good impression on the boss and also gain the cooperation of fellow workers.

A number of customer complaints were made to the manager of a small department store about the poor service rendered by the sales clerks. Most of the complaints mentioned situations taking place during the hour between noon and 1:00 p.m. Since experienced sales clerks got their choice of lunch hours, most of them went to lunch between noon and 1:00 p.m. This left the newer, inexperienced employees to handle the customers during this time.

Customer traffic was particularly heavy between noon and 1:00 p.m., and the manager requested that all employees be on the floor during this hour each day. Lunch hours were to be taken only between 11:00 a.m. and noon or between 1:00 p.m. and 2:00 p.m.

John had been taking his lunch hour at noon since beginning work in the store six months ago. John continued leaving at noon because he usually had lunch with a friend. The manager noticed this and warned him that if it occurred again his services would no longer be needed. John, thinking he had "earned" the right to a noon lunch hour, felt the manager was being unfair.

Does John have a right to continue taking a noon lunch hour? Why or why not?

How could this disagreement have been avoided?

Since the disagreement did occur, what could be done to solve it?

Honesty

1. Employers will expect their workers to be honest with them and with the company. Being dishonest on the job can take many forms. One form of dishonesty is stealing time by coming to work a few minutes late every day. Some workers cheat their employers by stopping work before the end of the work day. If the hours of work are eight to five, you should be on the job a few minutes early so that you will be able to actually start at eight. Your employer will expect you to continue working, except for breaks and lunch, until five. Your time during working hours belongs to your employer. Stealing this time costs the company money—money that might be used in part to increase salaries or otherwise benefit you. Stealing time is probably the most costly form of dishonesty in business.

Sam, 19, was a bookkeeper for a local service station. He was recently hired for this job, and his employer decided to test Sam's honesty. He placed 35¢ extra in the cash register to see what Sam would do about it. Sam decided to keep the 35¢ for himself because it was "over." He had been told to record it in the "cash short and over" ledger, but he didn't. His employer fired him. He told Sam that if he would take a small amount now, he might take a larger amount later.

Do you think that Sam was dishonest? _____

Do you think that Sam's employer was justified in firing him? Why or why not?

2. Linda and Lisa are secretaries in a large corporation that manufactures space vehicles. Linda arrives at work 10 to 15 minutes late, then goes to the ladies' room to put on her makeup. She gets to her desk about 8:30. Lisa always arrives at her desk promptly at 8:00 a.m. and begins her work. Even though Linda has better secretarial skills than Lisa, Lisa got a raise when it came time for salary review and Linda did not.

Do you think Linda's employer had a right to hold back her raise for being late? Why or why not?

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If you were Linda, what would you do to improve your chances of getting a raise next time?

_____

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3. Another form of dishonesty on the job is stealing company property. In one case, a young man regularly used the office postage stamps for his personal letters. He was not fired; but when it came time for selection of a new office manager, he was passed over mainly because of the dishonesty shown in his stealing stamps. Other employees have been fired for stealing supplies.

Initiative

Employers have a right to expect you to complete duties you are given and then, if you have not been told what to do next, to look around to see what needs to be done and do it. Of course, you must use good judgment. Do not attempt to do work that you are not qualified to do.

A student who had just graduated from high school was hired as a computer operator. She had excellent computer skills. However, she had never learned to use initiative. When she completed tasks she was given, she sat and read a magazine. Even when there was other work that could be done, she only worked when told exactly what job to do. Such constant supervision required so much of her boss's time that the problem was discussed with her on two occasions, but she had to be fired because she was not able or willing to change. Exercising initiative is probably the best way to show your employer that you are capable of accepting greater responsibility—which may lead to a promotion and salary increase.

Maime, age 17, was a waitress at a bus stop restaurant during the summer between her junior and senior years in high school. When the buses were in, all the waiters and waitresses were very busy waiting on customers; but after the buses left, most of them sat down to drink a Coke, eat, or just relax. Maime never sat down on duty. She kept busy cutting up lemons for tea or filling napkin holders and

salt and pepper shakers. She could always see what needed to be done, and she did it. The restaurant manager noticed her initiative and gave her a $2 per shift raise.

If you were Maime's boss, would you have given her the raise? Why?

_____

_____

_____

_____

Do you believe that time seems to pass faster when you are busy? _____

Initiative is not always rewarded with an immediate pay raise. If you felt that no raise in pay would be forthcoming, would it still be worth the effort to look around to see what needed to be done and do it? Why or why not?

_____

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Willingness to Learn

Employers expect their workers to learn the way things are done in their company. Employees should show an eagerness to learn everything they can about their job and the company for which they work. Those who are promoted to jobs with greater responsibility and higher salaries are usually the workers who have taken the trouble to learn about more than just their own daily tasks.

Bob did keyboarding for a large employment agency. He had a new printer that used special ribbons and needed changing every few days. He always asked one of the other employees in the office to change the ribbon for him, which the employees soon began to resent.

How would Bob benefit by learning to change the ribbon himself?

_____

_____

_____

_____

If you were an employer, what would you do about an employee who was not willing to learn?

Willingness to Follow Directions

When you are given directions about how to do your work, you are expected to follow them exactly. Sometimes you may not understand the reason for doing things a certain way, but your employer or supervisor has a reason. Do the work as you are directed. After you have worked on the job a while, you may ask "why" the directions are given the way they are and suggest other ways of doing certain tasks if you think your ideas will be well received.

Susan, 18, produces spreadsheets and charts for a local accounting firm. Her employer gives her directions on how she wants the charts displayed each time she gives her a job. Sometimes Susan changes the format slightly, thinking her way is better, only to have the work returned to be redone. After spending two days redesigning a piece of work, her employer warned her that if she failed to follow directions again, she would have to let her go.

Suppose that Susan's way is better than her employer's. Should she still do it her way? Why or why not?

Dependability

An employer will count on the workers' being on the job every day and arriving on time. Those who come to work late—even if they are not fired—are resented by the other workers who do come to work on time. Thus, the worker who is not dependable will also find it difficult to work cooperatively with fellow workers. An ill employee should call in sick by the time that work would normally start or before, if possible. Many workers lose their jobs because they do not take time to call their employers when they must be absent due to illness.

The Home Improvement Center hired Arnold part time to stack lumber, make deliveries, and assist wherever needed. His duties for a particular day were not usually known ahead of time, but he was given directions each afternoon when he reported for work.

Last Tuesday he was stacking lumber. When he finished the job early in the afternoon, his boss told him to take off early since everything seemed to be caught up. The next day Arnold did not show up for work at all. When he came in on Thursday afternoon the boss told Arnold he was fired. On

Wednesday morning the Center made a lot of sales which needed to be delivered that afternoon. Because Arnold did not show up or call in, the manager hired another boy to make the deliveries.

Was the manger unfair to Arnold? _____

Suppose that Arnold was ill on Wednesday. What could he have done to save his job?

_____

_____

_____

_____

Acceptance of Criticism

Nancy worked in the records management department of a bank. She was a good worker, always arrived on time, and almost never missed a day of work. Nancy's problem was that she could not accept criticism and benefit from it. On several occasions she made incorrect entries on her records. She was told by her supervisor that she must give more careful attention to certain details of her job. Each time the supervisor corrected Nancy, she would sulk—not speaking or smiling for the rest of the day. The supervisor was under a severe strain because it was difficult to criticize Nancy's work even when it was obviously necessary. Nancy was "let go" because it took too much of her supervisor's time to figure out how to approach Nancy without hurting her feelings.

Criticism is necessary. It is the way in which the employer lets you know how the job is expected to be done. Your employer will expect you to accept criticism—and improve because of it. It is best to take your employer seriously and thank him or her for the attempt to help you.

Accepting criticism means more than just listening politely. It means making use of the criticism. Think about your critic's remarks after you are alone and try to see how they can help you become a better worker. Of course, there are employers and supervisors who are unfairly critical; but there is nothing you can do about the boss's bad temper—except quit if it is too difficult a work situation. You must be able to take it, but you cannot lose your temper. Regardless of how a criticism was meant, it will be constructive or destructive depending upon how you use it.

Jack was a checker in a large grocery store. He was a good worker, very dependable, and never late for work. However, he made at least one mistake a day on his cash register receipts because he tried to ring up the groceries too fast. The manager became weary of seeing notes in Jack's cash register each day explaining his errors, so he decided to speak to Jack about it. He suggested that Jack should slow down a little and try to be more accurate. Jack became very upset and quit the job.

If you were Jack, what would you have done?

_____

_____

_____

_____

Loyalty

Just as none of us is perfect as a person, neither is any company perfect. You may not agree with everything your employer does or with some of the company policies, but you must not complain to your friends or try to "run down" the company that pays your salary. Loyalty to the company you work for is very important. Criticisms and complaints should be handled within the company—not in front of the public. Employers expect their workers to keep confidential those things that pertain to the business.

"I don't like working for Mr. Jones," Dick told his friend John one day at lunch. "I'd rather work for Mr. Baxter; at least he takes interesting cases."

A man at the next table overheard Dick and John's conversation. He was a friend of Mr. Jones' cousin and mentioned to the cousin what he had heard. The cousin told Mr. Jones, and the office atmosphere suddenly became very strained.

What was the cause of the unpleasant office atmosphere? Why?

_____

_____

_____

_____

If you do not like your job, should you discuss your concerns? With whom?

_____

_____

_____

_____

If you find that you cannot resolve your concerns, what should you do?

_____

_____

_____

_____

Work Ethic (Secondary)

Purposes: Students will

- demonstrate positive work attitudes,
- develop a resume,
- demonstrate good citizenship,
- explore career options through awareness activities,
- participate in work experience, and
- demonstrate basic skill competencies.

Have business representatives and educators meet to determine criteria for a "Diploma Endorsement Program." To receive a diploma endorsement upon graduation, a student must meet established criteria in the areas of attendance, punctuality, citizenship, achievement, participation, resume preparation, work experience, and career awareness. The criteria includes an opportunity for high school seniors who have experienced difficulty in the past to obtain the endorsement if they are willing to work harder in their last year.

Following are examples of criteria that may be used:

Attendance. Maintains good school attendance with absences not to exceed 20 days in four years. If at the end of the junior year absences exceed 20, a student may still qualify if senior year absences are three days or less, or are verified if greater than three days. Unexcused absences (truancies) may not exceed one infraction per year or four in four years. If by the end of the junior year infractions exceed four, a student may still qualify if there are no infractions in the senior year.

Punctuality. Arrives at school on time, and unexcused tardinesses don't exceed one per year or four in four years. If at the end of the junior year unexcused tardies exceed four, a student may still qualify if there are no unexcused tardies in the senior year.

Citizenship. Maintains good citizenship in school with no more than one serious infraction or suspension in four years. If by the end of the junior year, serious infractions exceed one, a student may still qualify if there are no serious infractions in the senior year.

Achievement. Maintains at least a C average in the basic skills (English, science, social studies, mathematics). If at the end of the junior year the average is less than C, a student may still qualify by maintaining the minimum of a C grade in each subject in each grading period for the senior year.

Participation. In 12th grade, receives a faculty endorsement. Two-thirds of responding faculty certifies that the student has demonstrated the abilities to

- work with others,
- be responsible,
- be dependable and follow through on assignments,
- communicate effectively—in writing and verbally,
- accept supervision and advice,
- maintain personal health,
- show a satisfactory attitude,
- perform beyond the stated assignment,
- show pride in work, and
- show desire for improvement.

If the student fails to receive the faculty endorsement, he or she may still qualify by requesting a second opportunity after the third quarter of the senior year. To receive a positive faculty endorsement in this "second chance," a student must receive 80 percent positive response from all senior year teachers.

Resume Preparation. Has an approved resume on file which includes positive, verifiable references (with address and phone number) from four faculty members and at least one nonschool, nonrelated adult. This must be completed by the end of the first semester of the senior year.

Work Experience. Within four years, completes a minimum number of satisfactory work experience hours, which are verified and supervised by the employer or supervisor *and* the parent or guardian. Minimum is defined as 60 hours of unpaid work experience or 180 hours of paid work.

Career Awareness. By the end of the first semester of the senior year, has had an opportunity for career exploration and awareness. The specific opportunity is locally determined.

(Janesville School District, Southern Wisconsin Education for Employment Project, 527 South Franklin Street, Janesville, WI 53545-4899)

School-Supervised Work Experiences 7

School-supervised work experiences is a set of planned educational experiences supervised by licensed school personnel and designed to enable learners to acquire attitudes, skills, and knowledge for work and other life roles through participating in actual or simulated work settings related to in-school instructional programs. Education for employment requires that all pupils in grades kindergarten through 12 have access to an education for employment program that provides school-supervised work experience. Work experience may include community field experiences relating to work in grades kindergarten through 12, more specific occupational training in grades seven through 12, and paid work experience in grades ten through 12.

In this sense, "community field experiences" are short-term activities designed so students learn about work and related life roles by studying, observing, and participating in the activities in an environment (actual or simulated) where those roles occur. "More specific occupational training" means opportunities to learn about work and related life roles by studying, observing, and performing them in an environment (actual or simulated) where those roles occur but where the employer derives no immediate advantage from the student trainee's efforts. "Paid work experience" provides an opportunity to learn about work and related life roles by studying, observing, and performing them in an environment where those roles actually occur. The employer derives economic advantage from the trainees' efforts and the students are paid for their time.

Most employers acknowledge that they prefer job applicants who have successfully held a job before—applicants who have a positive work record and experiences worth being included on their resume. The Parker study, explained in Section 1, also concluded that the importance of work experience cannot be overstated. When hiring, employers first look at work history and recommendations from previous employers.

During the last several years government agencies and private foundations have commissioned a number of panels to study what schools could do to better prepare youth for the transition from school to work. These panels and commissions included, among others, the *Panel on Youth of the President's Science Advisory Committee* (1973); the *National Panel on High School and Adolescent Education* (1974), whose efforts were sponsored by the U.S. Office of Education; the *Carnegie Council on Policy Studies in Higher Education* (1980); and the *National Commission on Youth* (1980), sponsored by the Kettering Foundation. Among the members of some of these groups were James S. Coleman, sociologist; Zvi Grilliches, economist; Joseph Kett, historian; Urie Bronfenbrenner, psychologist; B. Frank Brown, educator; George Gallup, public opinion researcher; and Dennis Gallagher, manpower expert. One of the key proposals from these studies was that earlier and more extensive participation in the world of work would

facilitate transition to adult life. Participants believed that the workplace can offer experiences that the school and family cannot. They believed that working teaches youth needed lessons about work and that work experience will help students become responsible, cooperative, and participating members of society. These reports forwarded the following arguments for school-supervised work experience:

- The structure of authority in the school limits opportunity for self-management, initiative, and decision making. The structure of tasks in the school and the criteria by which rewards are allocated fail to nourish cooperation and a sense of responsibility to others. The capacities for both individual and social responsibility need to be exercised and expanded.
- Children and adolescents are isolated from meaningful contact with older persons and spend too much time in the exclusive company of their age-mates. This social arrangement keeps youth from adopting more adult perspectives. Students need more opportunities to learn about the roles adults fill, to acquire work habits, job skills, and worldly wisdom from adults in the workplace. Youth need to learn about the roles that prevail in the adult community and the kinds of deviations from norms that are tolerated. Children and youth need to build up a supportive network of elders to whom they can turn for advice and help.
- Many youngsters fail to acquire work skills needed to make the transition to adulthood. In as much as lack of work experience and work skills are cited as factors that contribute to youth unemployment, earlier integration into the labor force should improve chances of being employed as young adults.
- There is much to be learned from people and activities outside of school. If school is to concentrate on improving academic skills, business settings must be relied upon more heavily to teach job skills and other practical everyday living skills.

Methods of Developing School-Supervised Work Experiences

Work experience is a method of instruction that can be used to deliver each of the other six elements of education for employment. A quality work experience can provide opportunities for practical applications of basic skills. Through work experience students can learn what is meant by a store's "market" and by the term "overhead"; how net income differs from gross income; or how much an item would cost if bought on installment—all practical applications of economics and mathematics. Work experience is also a partnership, a proven education method, a way to foster career planning and exploration, and a method of teaching employability skills and attitudes.

The connection between work experience and elementary age children may seem tenuous at first, but attitudes are formed at very early ages. While elementary age children may participate in community field experiences, their "work" is going to school. They learn important job skills like being on time, finishing assignments before play time, taking turns, cooperating with others, and listening carefully. They can be found visiting local businesses, counting change in a simulated school store, and presenting an idea or product (show and tell). They are rewarded for demonstrating good work habits.

They need to know that one of the reasons they are learning these skills is to help them become productive workers. Upper elementary and middle school age children learn about business operations, career exploration, and economic principles as well as continuing the development of good work habits.

School-supervised work experience has the potential to develop greater self reliance, a more positive work orientation, and a clearer sense of identity. Unfortunately, many students are working today in part-time jobs that are not related to any future career aspiration, and they

are receiving little or no supervision. They have equated success with making money, and unless the money is needed to support the family, it's probably counterproductive money. John Molloy interviewed high school students as part of his book, *How to Work the Competition into the Ground and Have Fun Doing It* (NY: Warner Books, 1987). This is what he found.

> One of the great myths in this society is that putting a child in a real job that pays real money will lead to success. We found this is not true. We found that children do not learn to work effectively in minimum paying jobs. What they learn in most cases is to do as little work as possible, or to do enough to get by. Minimum paying jobs exist mostly in the world of least common denominator productivity. It's work when the boss is watching, and goof off when he (or she) isn't.

Teenagers who have participated in school-supervised work experiences develop good work attitudes, are more employable, and often obtain higher paying jobs than those who have not participated in work experience programs. The experiences of having a responsibility for a set of tasks, associating with adults, learning certain skills, earning money, and managing time are important to growing up; they also are necessary for a smooth transition to adulthood and successful employment.

The question districts need to address is how to provide structure to student work experiences in order to make them meaningful and productive. Educators need to recognize that the profit motive is a strong force in the workplace. When youth select jobs without planning assistance from the school or their parents, they tend to choose them on the basis of economic payoff. Educators have a responsibility to evaluate worksites on the basis of their educational payoff (especially when the work experience occurs during school hours). Following are some recommendations to consider when designing appropriate work experiences. These suggestions are for supervised work experiences, which differ from employment in the naturally occurring youth labor force.

- Work experiences that provide little opportunity for decision making or cooperation with others are not likely to foster healthy independence or social responsibility. Jobs that have little connection with adults or the work youth will do as adults are unlikely to serve as effective bridges to adult employment.
- Most students would benefit from counseling before taking a part-time job. This counseling or guidance should be aimed toward helping them find good matches between available work and long-term educational and occupational aspirations.
- Educators need to plan work experiences to ensure greater variety in the job environment than may naturally occur. Job rotation would permit more opportunity for experimentation, identity exploration, and mastery of new information and skills.
- Adolescents may need to be persuaded to forgo some amount of short-term earning in return for a payoff in long-term learning.
- Work should be a maturity-enhancing experience. If possible, youth should work in the company of older people who can serve as mentors or role models.
- School attendance should be a condition for both obtaining and retaining a job (both during and after school hours).
- A satisfactory grade point average should be a condition for both getting and staying on the job.
- School personnel should establish a cap on the number of hours that students work. Too many hours of work each week may detrimentally affect academic performance. A rule of thumb would be no more than 15 hours of work per week.
- Students should be encouraged and assisted in asking employers to verify and evaluate job performance in a timely manner. Job evaluations must have a useful level of detail and must be conducted on a regular basis. Students should keep a careful record of their employment since these records will make them more employable in their early adult years.

- School credit may be granted for successful completion of work experiences. Granting credit is the process of giving positive evaluation to a specific learning experience.
- Collaboration between employers and school staff should be maintained on a systematic basis. Personnel from the workplace make a critical contribution. They need to be well informed about the program and what it is striving to accomplish. Further, they should play an active role in shaping the learning experiences. The school should assume responsibility for recognition of all personnel who implement work experiences.
- All persons responsible for work experience programs should be familiar with the laws and regulations governing the employment of youth in Wisconsin.
- Salary for students involved in paid work experience should be cooperatively determined by all parties involved, within the context of appropriate laws, regulations, and collective bargaining agreements.

Each district will implement school supervised work experience in a different manner depending upon the availability of businesses and resources within their community. However, if staff is assigned to monitor a work experience program they should develop learning stations, training agreements, training plans, discussions to promote reflection and interpretation. They should plan to visit students while they work, establish and implement evaluation procedures, and when appropriate, offer a related in-school course.

Alternatives to Paid Work Experiences

Not every district has the potential to offer work experiences outside the school. Community service work can be as beneficial as paid, part-time employment. Similarly, simulated settings provide an opportunity for a more controlled educational experience and afford more students the benefits of participating in work. Career exploration programs, supervised volunteer work, and simulations within the vocational disciplines (such as operating an insurance business within the business education classroom) are all methods to address the school-supervised work experience element. In-school businesses can also provide experience.

- A restaurant within the high school could serve the faculty and community, provide a catering service, and host community organization meetings.
- A custom car-care cleaning service could use the bus garage as a business site.
- A horticulture business could beautify school and community grounds while continually planting, transplanting, and caring for shrubs, trees, and plants for regular customers.
- A videotaping business could record and sell videotapes of weddings, proms, and graduations.
- A clothing repair, towel rental, and ironing business could be started.
- A custom baking service could fill orders for both the community and the school.
- A housekeeping service could include both domestic and institutional cleaning.
- A computerized bookkeeping service for small businesses might be an outgrowth of business/economics courses.

The emphasis in education for employment on work experience is not meant to diminish the value of extracurricular activities. In fact, many of the same competencies and understandings attributed to work experiences can be developed via participation in meaningful extracurricular youth activities.

Components of School-Supervised Work Experiences

- Work experience programs are taught by certified teachers/supervisors with teacher-student ratios no greater than district classroom averages.

- Part-time work assignments, job shadowings, career exploration, community service, and/or job simulations are accessible to all students.
- Periodic work experience performance evaluations are completed by employers on skills and attitudes for each student enrolled.
- Work experience programs include written work experience agreements and educational plans defining roles and responsibilities of the student, teacher, employee, and parent.
- Short-term community field experiences offer activities to learn about work and related life roles by studying, observing, and participating in an environment where those roles occur.

Competencies

Community Field Experiences

- Learn about the factors to be considered in the development of a logical career decision.
- Understand and explore educational factors involved in career planning.
- Develop a better understanding of family, community, school, and other interpersonal relationships.
- Overcome historical sex-role stereotyping, bias, and discrimination related to career development.
- Recognize the value and importance of education.
- Apply general education skills, including communications skills.

Occupational Training

- Explore careers (including nontraditional occupations).
- Develop attitudes of self-confidence and feelings of individual worth.
- Develop employability skills.
- Develop and assess competencies and attitudes necessary for postsecondary education or employment.
- Develop a positive approach to accepting criticism for self-improvement.
- Develop increased work maturity skills.

Paid Work Experience

- Demonstrate job responsibility.
  - Anticipate job responsibilities beyond the job description.
  - Manage personal responsibilities.
  - Work effectively without supervision or with limited supervision.
  - Instruct or direct someone in the performance of a specific task.
  - Assign others to carry out specific tasks.
  - Routinely follow up on tasks to be sure they get done.
  - Seek advice when needed.
  - Act appropriately in unusual situations.
  - Define the concepts of authority and responsibility.
  - Take responsibility and be accountable for the effects of one's own judgments, decisions, and actions.
  - Take initiative to stop work in unsafe environments.
  - Handle mistakes effectively and learn from them.
- Demonstrate dependability.
  - Consistently be on time for work/ training.
  - Comply with employer/agency attendance policy.
  - Notify employer/instructor of necessary absence or tardiness.
  - Take no excessive time off and give advance notification whenever possible.
- Demonstrate effective use of time.
  - Arrive on time, start work immediately upon arrival, and work until the end of the day.
  - Be on time for activities and appointments during the day.
  - Manage time wisely and demonstrate the ability to prioritize tasks.
  - Develop a weekly schedule/goals.
  - Identify roadblocks to completing a job, such as procrastination and making excuses.
  - Complete tasks on time.
  - Use company time for company business; conduct personal business only during breaks.

- Demonstrate appropriate dress for the job.
  - Display care for personal hygiene and good grooming.
  - Adhere to uniform policies.
  - Wear appropriate work clothing.
  - Wear appropriate hair style for work.
  - Identify and inventory grooming strengths and weaknesses and plan appropriate change as needed.

- Effectively operate job-related equipment and machines.
  - Use property and supplies carefully and appropriately.
  - Operate equipment safely, complying with applicable local and company policies as well as state and federal regulations.

Field Trips (K-12)

Purposes: Students will

- learn about businesses in their community; and
- understand skills, attitudes, knowledge, and education needed for various jobs.

Many school districts already have students take field trips to businesses as part of the total school program. Frequently, students and teachers are given a tour of a business and have an opportunity to see workers performing their jobs. Following are some suggestions to provide a more structured and meaningful field experience:

- Provide students with an opportunity to talk with employees from all levels and kinds of jobs. Have students preplan questions such as, "Do you use reading, writing, and mathematics as part of your job?" "How much training and education is needed in your job?" "What are the most important skills and characteristics needed to do your job?"
- Ask the employers in advance to discuss practical business operations and economics as it relates to their particular businesses.
- Ask both employees and employers to discuss how the nature of their particular business/job is changing and what future job skills and attitudes will be needed by employees.

In-School Work Experience (K-12)

Purposes: Students will

- develop a sense of accomplishment and pride in having completed a work assignment,
- develop employability skills,
- complete an aide application, and
- experience a work evaluation.

Many in-school work experiences already exist but have not been structured and evaluated. In this activity, teachers provide formal job descriptions, orientations, and evaluations for student jobs within the school structure. Students are evaluated based upon employability skills and attitudes. These evaluation forms may be kept for future reference, and at the secondary level, they may be used in applying for jobs and writing resumes. At the elementary level, no credit is given, but at the secondary level, credit is given instead of pay. Types of student jobs might include student helpers at the elementary level and teacher aide work, office work, maintenance jobs, and kitchen help at the middle and secondary level. The evaluation form that is used is based upon the level of the student—one example is shown for elementary and one example is shown for middle and secondary. (Lake Mills Area Schools, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Sample Helper Jobs (Elementary)

Classroom Librarian. Student is responsible for putting out books, setting up book displays, keeping books in order, and keeping classroom library area tidy–one week.

Room Manager. Student is responsible for getting art smocks out, changing room arrangement, setting up paper and materials for projects, and stapling–one week.

Gardener. Student is responsible for taking care of plants in classroom—watering, fertilizing, defoliating–one week.

Electrician. Student is responsible for assisting with filmstrip and movie showing, getting screen down, lighting, equipment set up and take down, and operating the phonograph–one week.

Chalkboard Manager. Student is responsible for keeping chalk available, cleaning erasers, and cleaning chalkboards–one week.

Mail Clerk. Student is responsible for collecting and distributing information to students in their individual classroom mailboxes–one week.

Sample Aide Jobs (Middle and Secondary)

Food Service Aide. Student assists food service personnel in preparing hot lunches for the district and must be willing to perform a variety of tasks such as assist in cafeteria set-up and clean up, wash dishes, serve food, load and unload grocery shipments, and assist in food packaging for delivery to other buildings–one semester.

Audiovisual Aide. Student will assist in handling AV equipment. Sample duties may include transporting equipment to and from classrooms, conducting inventories of equipment and supplies, taping (video) at special events and extracurricular activities, and setting up and repairing equipment–one semester.

Graphic Arts Aide. Student will assist in producing printed products for the administrative offices, teaching staff, clubs, and school organizations. Sample activities may include set-up/lay-out of materials and forms; use of equipment to print; assembling, collating, binding of booklets; cleaning and maintenance of equipment; delivery of materials–one semester.

School Store Manager. Student will assist in the operation of a school store. Managerial skills will be developed such as assigning work hours, rating/evaluating other workers, setting up visual displays, record keeping of store accounts, managing and keeping inventory, and buying and purchasing–one semester.

Library Aide. Student will assist librarian in general operation of the library including checking in and out materials, preparing fine slips, returning books to proper shelves, inventorying books and magazines, helping students locate materials, planning and developing bulletin boards and displays, and photocopying–one semester.

It is important that in-school work experiences be highly structured to be beneficial. Districts should set up standards or criteria to use in selecting students for the program, students should fill out an application (sample included) prior to acceptance, a training/experience plan should be developed that details student and supervisor's expectations, and students should be evaluated on a regular basis.

Sample Aide Study Application

(To be completed by student)

Note: This form must be completed in full or it will not be considered.

Title of Aide Study Program _____

Student's Name _____

Address _____

City _____ Zip _____

Telephone No. _____ Social Security No. _____

Date of Birth _____ Grade in School _____

Immediate Supervisor's Name _____

What period will you be able to work? _____

Please answer the following questions:

1. Why do you wish to be an aide in this subject area?

2. What experience do you have in this area? What other related courses have you studied?

3. What do you hope to learn? What skills do you wish to acquire?

4. How do you hope to realize this goal?

5. What problems or conflicts do you foresee, if any?

I hereby agree to the aide experience plan attached.

Student _____ Advisor _____

Student's Parents or Guardians _____

Guidance Counselor _____

In-School Work Experience

Elementary Evaluation Form

Student

Name _____

Job Description _____

_____

_____

_____

_____

Amount of Time _____

Directions: Check the correct face for each characteristic you think applies to you.

Work Attitude	Rating		
	Good	OK	Needs Help
1. I am responsible.			
2. I am on time.			
3. I listen carefully.			
4. I do my best.			
5. I am happy.			
6. I work well with others.			
7. I am honest.			
8. I am organized.			

Teacher

Directions: Check the correct face for each characteristic that applies to your student.

Work Attitude	Rating		
	Good	OK	Needs Help
1. I am responsible.			
2. I am on time.			
3. I listen carefully.			
4. I do my best.			
5. I am happy.			
6. I work well with others.			
7. I am honest.			
8. I am organized.			

Identify any transferable employability skills learned, if appropriate.

_____

_____

_____

_____

Teacher Signature _____

Date _____

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In-School Work Experience

Middle/Secondary Evaluation Form

Student's Name _____

Title of Project _____

Advisor: Please rate the following statements by placing an "X" in the appropriate space. A, B, C, D, F and Not Applicable will be used in grading the student.

Excellent = A; Above Average = B; Average = C; Poor = D. An "F" shows failure to meet minimum standards.

Characteristic	A	B	C	D	F	N/A
Demonstrates willingness to learn						
Exhibits acceptable personal grooming						
Reports to work on time						
Applies self to the job						
Adapts to new situations						
Initiates work without supervision						
Does the job satisfactorily						
Possesses emotional stability						
Shows self-confidence						
Follows directions						
Accepts criticism						
Exhibits ability to work with others						
Works safely						
Works above and beyond demands						

Advisor Grade _____

Other factors entering into the final grade such as written reports or assignments:

List these factors and the grade _____

_____

Note: It is suggested that students be evaluated every four weeks so they will have an opportunity to improve. It may be a good procedure to ask students to first evaluate themselves. It is very important to sit down with students and discuss the evaluation once it has been completed. Remember, positive feedback and strategies for improving are an important part of the evaluation.

Weekend Work Experience (Elementary/Middle)

Purposes: Students will

- involve the family and school in providing a work experience opportunity,
- develop a sense of accomplishment and pride in having completed a work assignment, and
- receive opportunities for improvement through an evaluation process.

This activity was designed to join the family and school in developing students' work habits and attitudes. The activity is voluntary for families that wish to participate. Parents assign their child jobs to do at home, and then evaluate the child's performance using the form provided. The child returns the form to the teacher within a designated time. (Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Sample Form

Dear Parent and Guardian:

This year our school is doing some work experience activities to help prepare our students for the world of work. We are asking you to assign weekend work experiences to your child. Selecting a job with a new challenge will make it more interesting. We are concerned that the job be appropriate for the age and experience of your child; we hope to make this a successful experience.

Please fill out the job description. It may help to discuss the evaluation questions with your child before the job is started. After your child has completed the job, please fill out the evaluation. We appreciate your help and welcome your comments about this project.

Please return this form to the teacher on _____, if possible. Thank You.

Weekend Work Experience

Child's Name _____ Date _____

Job Description _____

_____

Directions Given to Your Child _____

_____

Amount of Time Required _____

Initiative
Was your child willing to do the job? ☐ Yes ☐ No

Quality
Was the quality of work acceptable? ☐ Yes ☐ No

Attitude
Did your child accept your advice with a smile before and after the job? ☐ Yes ☐ No

Responsibility
Did your child complete the job on time? ☐ Yes ☐ No

Organization
Did your child find and put away the necessary materials in an organized way? ☐ Yes ☐ No

Cooperation
Did your child work well with others? ☐ Yes ☐ No

Adaptability
Was your child willing to try a new job? ☐ Yes ☐ No

Comments _____

_____

Parent/Guardian Signature _____

On-the-Job Work Experience (Secondary)

Purposes: Students will

- receive an opportunity to work in a realistic on-the-job situation,
- experience a variety of realistic learning experiences to help them assess their true interests and abilities,
- develop work habits and attitudes necessary for maturity and job competence,
- have an opportunity to understand the interpersonal relationships in business, and
- experience the "team" effort needed for an effective work environment.

Giving students an opportunity for on-the-job experience coordinated with the school is one method of providing school-supervised work experience. Many variations of this plan are possible, limited only by a community's imagination. This particular sample involves giving credit for on-the-job experience and includes an instructional component at the school. Program development and implementation is the responsibility of a certified district-paid project coordinator, with assistance from advisory councils, the Education for Employment Council, local businesses, parents, and school personnel. The program can operate in tandem with other vocational work experience programs. Students who enroll in the program are released from school for on-site work during certain periods of the school day. (Adapted from Lake Mills Area Schools, Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Program Development

- School notifies businesses of program and its components.
  - letter/informational mailing
  - telephone
  - newspaper
  - students
  - on-site visitation by project coordinator
- Local businesses notify school of interest in program and availability of positions.
  - types of jobs/job descriptions
  - employer expectations
  - hours of work available
  - application requirements
  - election requirements
- Business/school hold meeting at work site to discuss program components.
  - variety of job experiences
  - student application/interview process
  - regular, ongoing evaluation of student performance
  - agreement of work hours
  - training agreement plan to include tasks to be performed and work-related attitude expectations
- Select students for employment through regular employment procedures.
  - application
  - interview
  - business/project coordinator/student conference

- Train student.
  - initial
  - ongoing
- Monitor/evaluate student.
- Periodic meetings held between project coordinator, employer, and student.

Student Responsibilities

- Express interest in work experience program.
- Read about program and complete work experience program application.
- Meet with project coordinator to discuss program enrollment, requirements, procedures, and scheduling.
- Assist in job placement.
  - on own
  - with school assistance
  - regular placement procedures such as application and interview
- Meet with employer and project coordinator to develop and discuss job expectations.
- Begin/continue employment.
  - meet job expectations
  - meet with employer
  - meet with work coordinator
- Follow school district guidelines for participation in program.
  - If students skip or are unexcused from any class or study hall, they may lose work release privileges (job and credit).
  - Criteria for granting credit should include completing an application, meeting classroom expectations, and satisfactorily completing work at job site.
  - Any significant change in job description should be approved by project coordinator.
  - Failure to follow all work experience rules may result in loss of work experience credit.
  - Students are expected to carry minimum credit load requirements as a prerequisite to involvement in the work experience program.
  - On-the-job time requirements should include a minimum of 15 hours per week up to a maximum of 25 hours per week.
- Students should keep a daily record form of date, time reported to work, tasks performed, departure time, and total number of hours. It should include signatures of both employer and student.

Employer Responsibilities

- Students are expected to be at work during agreed upon work hours. If a student does not report for work or if the employer changes the work schedule, contact the project coordinator immediately.
- If there are any problems with the performance of the student, call the project coordinator. It is best to communicate and adjust minor problems before they become major issues.
- If a student needs to be laid off or discharged, notify the project coordinator as far in advance as possible. Time is needed to locate a new work station for the student.
- Notify the project coordinator of any significant change in a student's duties at the work site.
- Be as objective as possible in evaluating the student's work performance. This evaluation along with the project coordinator's evaluation determines the student's grade and credits.
- Follow state and federal guidelines/laws for employing young workers.

Knowledge of Business Operations and Economics

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Knowledge of business operations and economics involves the study of business, industry, labor, and agricultural organizations and their role in a local, state, national, and international economy. It includes studying entrepreneurship and entrepreneurial skills, consumer and household economics, and the economic role of citizens.

General knowledge of business operations and economics is not only critical to a student's ability to get a job, it is important to job success and to the vitality of employing businesses. The United States' economy is now a global economy; the industrial economy has rapidly given way to a technological/information era. Technological change has been more rapid in the last 20 years than in the previous 600 and the next 20 years promise to bring even more change. These are realities of the twenty-first century.

Agencies working with small business development say lack of appropriate management and marketing skills are the most common factors in small business failures during the first year of operation. For many entrepreneurs, business success depends on the skills they gain in high school. Since 63.5 percent of the new jobs created from 1980 to 1986 were created by small business,* the health of our economy partially depends upon the success of these entrepreneurs.

Education for employment brings knowledge of business operations and economic systems into the general (as well as the vocational) curriculum. All students, regardless of future career aspirations, need an understanding of business and economics. One Wisconsin employer feels that when employees don't have good work attitudes it is because they don't understand business and the need to generate a profit. This company stresses that employees must understand what the customer means to a company and that every employee must generate a profit.

Productivity is a critical economic concern. Lagging productivity results in a sluggish economy—inflation, unemployment, and the inability to compete internationally. An emphasis on these topics should be integrated with other elements of education for employment.

*Joan C. Szabo, "The Job Machine Rolls On," *Nation's Business* 76.7, July 1988, p. 10.

Components of Business Operations and Economics

- A curriculum for economics is developed (either as a separate course or integrated into other courses). It should incorporate studying
  - general business operations;
  - entrepreneurial skills;
  - agriculture and labor organizations;
  - the free market and other world economies;
  - personal economic decisions in relation to career choices;

- economic understandings, collective decisions, and personal potential at home and at work;
- the influence of work performance on standard of living and available goods and services;
- market choices and economic activities; and
- governmental influence on community and state economic well-being.

- All staff and teachers receive inservice training on the importance of student understanding of practical economics and business operations as part of their preparation for employment and/or further education or training. Expertise from the business community is tapped to help provide staff development.

Competencies

Adapted from H. Craig Peterson, *Economics of Work*, Cincinnati, OH: Southwestern Publishing, 1983; and Anne Scott Daughtrey, Robert H. Ristau, and Steven A. Eggland, *Introduction to Business: The Economy and You*, Cincinnati, OH: Southwestern Publishing, 1986.

Social Living

- Develop a personal sense of self-worth by demonstrating attributes of responsibility, cooperation, sharing talent, independence, and decision-making.
- Gain an understanding of the interdependence between consumers and producers.
- Develop an appreciation for the value system of others and how values affect choices.
- Become aware of the contributions of workers to economic development.
- Understand the necessity for division of labor within family, institutions, and community.

Free Enterprise

- Explain what an economic system is.
- Define and illustrate the meaning of the term "free enterprise system."
- Explain the differences between wants and needs.
- Define the terms "goods" and "services."
- Define "scarcity" and explain some of its causes.
- Explain why basic economic problems force individuals to make choices.
- Determine how free enterprise compares with other economic systems.
- Describe the role of money in the economic system.
- Explain how prices are determined.
- Understand how competition works in a free enterprise system.
- Understand that human wants are unlimited and economic resources are limited.
- Explain the importance of human resources in the production of goods and services.
- Understand the need to make a profit from business ventures.

Relationships Between Individuals and Organizations

- Explain the advantages and disadvantages of a sole proprietorship, a partnership, and a corporation.
- Describe how specialization of labor increases the amounts of goods and services that can be produced.
- State the main results of mass production in a modern economic system.
- Describe the development of labor unions in the United States.
- Explain some of the more important laws that affect unions.
- Describe the organization of labor unions.
- List the primary goals of unions.
- Explain the steps involved in forming a union and in collective bargaining.
- Describe the importance of productivity in the role of the worker.
- Explain how the worker role supports the consumer role.
- Understand how productivity is related to the standard of living.

Relationships Between Businesses and the Economic System

- List factors that determine interest rates.
- Show how interest rates affect the demand for capital goods.
- Describe the differences between stocks and bonds.
- Explain what marketing is and why it is important in the economic system.
- Explain the purpose of wholesalers and retailers.
- Explain how a new business in a community can create jobs for local citizens.
- List some of the problems that can occur when businesses enter or leave a community.
- Explain how trading between nations can benefit the citizens of each country.
- Define the terms "exports" and "imports."
- List some of the problems created by trade between nations.
- Give examples of ways through which businesses carry out social responsibility.

Entrepreneurship

- Understand the risks and opportunities of small business operation.
- Determine potential as an entrepreneur.
- Develop business plans.
- Obtain technical assistance and researching resources.
- Differentiate between types of ownership.
- Learn how to plan market strategies.
- Identify strategies to use in determining business locations.
- Identify sources for financing businesses.
- Become familiar with the government regulatory process.
- Learn to manage businesses and human resources.
- Develop methods to promote businesses.
- Consider entrepreneurship as a career option.

World Trade and the Economy

- Explain how people, communities, and nations throughout the world depend on each other.
- Give an example to show the difference between foreign trade and domestic trade.
- Explain how the United States depends upon world trade for many goods and services.
- Describe how tariffs, quotas, and embargoes affect world trade.
- State an advantage of and a problem associated with world trade.
- Discuss factors that are affecting the future of the work force.
- Describe employer demands for future workers.

The Role of Government

- Identify the gainers and losers from inflation.
- List types of inflation.
- Explain how the rate of inflation is measured.
- Discuss what is meant by "gross national product" and how this measure is used to evaluate the economic system.
- Explain how the rate of unemployment is measured.
- Explain how government acts as a referee in the economic system.
- Discuss the need for government involvement in the banking system.
- Explain why protection of the environment is a responsibility of government.
- Describe how government deals with public utilities.
- Discuss how government attempts to reduce inflation and unemployment.
- List purposes of taxation.
- Identify the most important sources of revenue for federal, state, and local governments.

Mini-Economy (Elementary)

Purposes: Students will

- simulate real economic activity;
- develop an understanding of economic concepts such as scarcity, opportunity cost, money, specialization, supply and demand, trade, profit, and inflation; and
- understand relationship between economics and other subject areas.

The concept of operating a minieconomy within the classroom focuses on active rather than passive learning. Students do not merely learn about an economic system, they actually experience one. To operate a minieconomy, students earn play money in a variety of ways and spend it at a class store or class auction. Students apply for classroom jobs, run businesses, pay taxes, make investments, and so on. Although the actual activities in operating a minieconomy can vary, there are some common steps.

Design the Classroom Money

Determine What the Money Will Buy. Students must be able to use their money to purchase "goods and services" that they value. Two basic categories that can exist in a typical classroom are tangible items and class privileges. Some examples of tangible items include candy, used clothing and books, posters, baseball cards, pens and pencils, small cars, and desk calendars. Some examples of class privileges are line leader, writing on the chalkboards, taking attendance, making bulletin boards, supper at a teacher's home, and choosing recess activities. Some teachers may encourage the students to bring unwanted items from home for sale or auction.

Determine How to Distribute Items and Class Privileges. Two basic ways to distribute items and privileges are through class auctions (students make bids to determine who gets the offered items and privileges) and class stores (students can buy necessities and privileges). When operating a class store, students should be involved in pricing items. This provides an excellent opportunity to discuss supply, demand, and prices.

Decide How Students Will Earn Money. Some teachers help students earn money by paying students for various types of behavior such as neat work, completed assignments, and clean desks. Other teachers prefer less teacher control and direction and have students earn income by doing classroom jobs or by creating classroom businesses. Many teachers combine approaches.

Classroom Management Ideas. Extra credit work, reading books (payment per book or per page), improvement in work, and studying quietly

Classroom Businesses. Art paintings or drawings, class or school newspaper, popcorn, craft items, greeting cards

Services. Tutoring, desk cleaning, music or dancing lessons, singing telegrams

Classroom Jobs. Janitor, class messenger, plant caretaker, audiovisuals technician, homework monitor (keeps track of assignments of absent students), and librarian

Begin. While the first four steps provide enough information to start a minieconomy, the last step is to begin. Start by announcing to the class that you are going to help them become better citizens and workers by paying them for various behaviors and/or jobs. Discuss or list various possibilities and how much each is worth. It is effective to display a wad of money during this discussion. The room will soon be buzzing with excitement, and before long, someone will ask the next logical question, "But what can we buy with our money?" That is the time to explain the class auction or store. Display various types of items that will be sold and explain the various class privileges that will be offered.

Do not expand the minieconomy too quickly. It is best to start simply and then expand gradually at a pace that is manageable for the classroom. A class bank, with checking and/or savings accounts, and bank employees is a natural second step.

(For more information on operating a minieconomy, contact the Indiana Department of Education, Division of Curriculum, Room 229, State House, Indianapolis, IN 46204-2798. The department has a practical, 76-page publication available ($4 including postage and handling or $3.50 in quantities of 25 or more).

The Popcorn Market (Elementary)

Purposes: Students will

- determine that sales and interest in products and services change depending upon the amount and kind of advertising used,
- understand the effect advertising has on their desire for certain products or services, and
- learn methods of marketing products.

Have students list toys they want. Then discuss: 1) How did students find out the product existed? 2) How did students know when a new product was available? 3) What is advertising?

Organize students into a production unit to pop popcorn and bag it in small amounts. Identify a crew, supervisor, and quality control person. Determine the most productive and efficient way to get the job done based upon the least amount of opportunity cost to the classroom studies.

Next, discuss and decide upon a marketing strategy. Following is a sample:

Day 1. Have popcorn available, but do not mention that a free bag of popcorn is available after school to any student who asks. Count the number of bags handed out and chart the number.
Day 2. Have students tell their friends about the free deal. Count and chart the number of bags handed out this day.
Day 3. Deliver an advertisement (oral, poster, or announcement) to every classroom telling all students about the free popcorn. Count and chart the number of bags handed out this day.
Day 4. Announce that the free popcorn experiment is over. Discuss results of the experiment. Have students each make a chart of the experiment. Discuss with students products they have purchased because they were made aware of them by advertising—knowledge of new products, prices, junk food, and unneeded items.

(Adapted from Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Entrepreneurship (Middle)

Purposes: Students will

- learn what the term "entrepreneurship" means,
- become aware of characteristics and attitudes of entrepreneurs,
- develop awareness of pitfalls and benefits of small business operations, and
- assess personal characteristics to determine aptitude for entrepreneurship.

There are a variety of quizzes available to assess a person's aptitude for entrepreneurship. Give students some of these quizzes and spend time discussing characteristics and attitudes of people who become successful entrepreneurs. As a follow up to this activity, a panel of local entrepreneurs could be invited to the class to discuss the benefits and pitfalls of small business ownership. (From *Job Market*, American Vocational Association 1:2, Fall 1987, p. 5.)

Following are two sample entrepreneurship quizzes:

Entrepreneur's Quiz: Do You Measure Up?

If you think you can handle what the business world dishes out, you should be able to honestly answer "yes" to the following questions. If you have reservations about any of the questions, you might reconsider your plans for going into business.

1. Am I a self-starter, easily motivated, and willing to take the initiative to get the job done?
2. Do I really like and care for people and get along with most people I come in contact with?
3. Can I get others excited about things that I'm interested in?
4. Do others follow my orders out of respect for me?
5. Can I accept responsibility and make good decisions even in a moment of crisis?
6. Do I have a lot of physical, mental, and emotional energy to keep me going until I complete a task?
7. Is dealing with money in a sometimes risky situation an adventure for me?
8. Will I feel I'm accomplishing something, even if I don't make as much money during the start of my business as I might make in a regular job?
9. Can I accept the fact that it may be impossible to take vacations or holidays for a long time when I go into business?
10. Will I still feel good about going into business, even if friends or family criticize my decision?
11. Can I remain organized, even if there are numerous tasks that I must complete?

Could You Be an Entrepreneur?

In recent years entrepreneurs, or folks who do things their own way, have become a highly analyzed species, but often the data uncovered have been so voluminous as to confuse rather than clarify. Among the most confused, perhaps, are thousands of would-be entrepreneurs whose friends tell them they are not equipped with the qualities for success. Recognizing this situation, the Northwestern Mutual Life Insurance Company of Milwaukee, which considers its own agents to be entrepreneurial, wondered what it is that makes a good entrepreneur. And so it commissioned a test. Professor John Braun, a psychologist at the University of Bridgeport, is the author of this somewhat revealing—if not entirely scientific—quiz that aims to clarify your own understanding. ("Could You Be an Entrepreneur? Test Reveals Necessary Traits," *Milwaukee Sentinel*, October 15, 1987.)

1. Significantly high numbers of entrepreneurs are children of first-generation Americans. If your parents were immigrants, add one to your score. If not, subtract one.

2. As a rule, successful entrepreneurs were not top achievers in school. If you were a top student, deduct four. If not, add four points.

3. Entrepreneurs were not especially enthusiastic about group activities in school. If you enjoyed such activities, subtract one. If not, add it.

4. Studies show that, as youngsters, entrepreneurs often preferred to be alone. Did you prefer aloneness? If so, add one. Otherwise subtract it.

5. Those who started childhood enterprises, such as lemonade stands, or who ran for elected office at school, can add two, because enterprise is easily traced to an early age. Those who were not enterprising must subtract two.

6. Stubbornness as a child seems to translate into determination to do things one's own way—a hallmark of proven entrepreneurs. If you were stubborn enough to learn the hard way, add one. Otherwise subtract it.

7. Caution may involve unwillingness to takes risks. Were you a cautious child? If so, drop four points. If you were not cautious, you can add them.

8. If you were more daring than your playmates, add four.

9. If the opinions of others matter a lot to you, subtract one. Add one otherwise.

10. Weariness with daily routine is sometimes a motivating factor in starting a business. If this would be a factor in your own desire to go out on your own, you have earned yourself two points. Otherwise you've lost them.

11. If you really enjoy work, are you willing to work overnight? Yes, add two. No, deduct six.

12. Add four more if you would be willing to work as long as it takes with little or no sleep to finish a job. No deductions for failing to fit this pattern.

13. Entrepreneurs generally enjoy their activity so much that they move from one project to another without stopping. When you complete a project successfully, do you immediately begin another? Yes, plus two. No, minus two.

14. Would you be willing to spend your savings to start a business? If so add two—and deduct that many if you are not.

15. Add two more if you'd be willing to borrow from others to supplement your own funds. If not, you lose two points.

16. If you failed, would you immediately work to start again? Yes gives you four, no takes that many away.

17. Subtract another point if failure would make you look immediately for a good paying job.

18. Do you believe entrepreneurs are risky? Yes, minus two. No, plus two.

19. Add a point if you write out long-term and short-term goals. Otherwise subtract a point.

20. You win two points if you think you have more knowledge and experience with cash flow than most people. You lose them if you think you don't.

21. If you're easily bored, add two. Deduct two points if you aren't.

22. If you're an optimist, add two. If you're a pessimist, erase two.

Scoring

If you score 35 or more, you have everything going for you. Between 15 and 35 suggests you have background, skills, and talent to succeed. Zero to 15 indicates you ought to be successful with application and skill development.

Zero to minus 15 does not rule you out, but it indicates you would have to work extra hard to overcome a lack of built-in advantages and skills. And if you score less than minus 15, your talents probably lie elsewhere.

Sample Business Operations/Economics Activity

Local Business Dollar Appropriations (Middle)

Purposes: Students will

- identify how a local business dollar is appropriated,
- recognize that business profits are necessary to remain competitive in a free enterprise system, and
- understand business costs of labor and resources.

A picture of a local business will be shown to the class and the class will name the business. Students will be asked to guess in percentages how a dollar is spent in that particular business. The breakdown will include the

- cost of goods and services (resources) bought from others,
- cost of tools or materials wearing out,
- cost of government taxes (federal, state, and local),
- cost of labor, and
- profit made.

A representative from a local business will speak to the class about the way the dollar is spent and identify how profits are used in the company. A copy of the annual report may be prepared for each student. Each student will take notes and based upon percentages, accurately cut and paste a copy of a dollar bill identifying the various cost and profits of that business (see sample). (Adapted from Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Sample:

Economic Growth (Secondary)

Purposes: Students will

- recognize that economic development has advantages and disadvantages,
- identify economic cycles, and
- recognize three ways economic development can be stimulated.

Discuss changes in the United States economy and causes and effects of the economic cycles of the last ten years. Identify ways in which economic development might be stimulated. Invite the director of the local Chamber of Commerce to speak to the class about economic development in the county or city, including plant closings and lay offs (if any) during the 1979-83 recession, and future industrial and occupational projections. Students should take notes and, depending upon the types of information provided, prepare charts and graphs for their community or county depicting economic changes. Sample charts and graphs based upon Wisconsin state labor market information are available through the Department of Industry, Labor and Human Relations, 201 East Washington Avenue, Madison, WI 53707. Samples are shown in Appendix D. (Adapted from Jefferson County Consortium, Education for Employment, 111 Dodge Street, Watertown, WI 53094.)

Stock Investment Project (Secondary)

Purposes: Students will

- understand the economic system through the law of supply and demand ,
- learn about the securities market, and
- understand the risks and benefits involved with investments.

Students usually enjoy a stock investment project, which gives them exposure to the securities market and an opportunity to better understand the economic system through the law of supply and demand. This activity also teaches students about the risks as well as the benefits involved with investments.

In the fall, a three-week unit should be presented on securities—stocks and bonds. Each student receives an individual lecture packet, vocabulary list, manila folder, and several practice tests. As part of the class assignment, each student selects a stock choice from the listings on the New York Stock Exchange, which are shown in most daily newspapers. As many as 100 different stocks may be selected. The students record 20 daily transactions from the newspaper during the three-week period. In the meantime, the instructor should contact a stockbroker (who becomes a future guest speaker) from a brokerage firm in the area. The stockbroker should be kept up to date with the students' selections and the stock transactions.

On a designated date, a typed list of all the stock selections and transactions should be presented to the students for a vote. The 30 stocks receiving the most votes will become the initial list for the broker's research recommendations. Send a copy of the list of 30 stocks to the broker.

Before the end of the investments unit, each student receives a stock investment contract approved by a lawyer. Students will be given opportunity to invest money on the New York Stock Exchange. Their investment should be on a *voluntary* basis. The contract must be signed by a parent or guardian because of most states' custodian laws. There should be a $1-minimum with no top limit. The stocks to be purchased through the stock brokerage firm will be decided through a second vote in order to get the initial list down to 20 stocks. Send a copy of the list of 20 stocks to the broker.

After the signed contracts and money have been collected, set a date with the stockbroker for the actual purchases. Student representatives from the classes, along with the instructor, will meet at the stock brokerage firm to decide which stocks to purchase and the dollar amounts involved. Before the final selections, students may watch the ticker-tape results and receive additional information from the broker's Quotron computer.

The Sharebuilder Plan designed by Merrill Lynch Pierce Fenner and Smith Incorporated is an inexpensive and convenient way to invest in stocks, mutual funds, and precious metals. Since a person invests by the dollar amount and not by the share or ounce, the investor can acquire fractions of shares or ounces (to four decimal places) as well as whole units. Because of Sharebuilder's low purchase requirements and reduced brokerage fees, the students can make investments that might have been out of reach. Unless otherwise requested, all dividends paid on the stocks and mutual funds may automatically be reinvested, furnishing more shares of the stocks. Merrill Lynch holds and insures the securities free of charge. With Sharebuilder, Wall Street is as close as the telephone. Calling a special toll-free number or working through the broker, the students are able to check information about the account, sell all or part of the holdings, make additional purchases with sale proceeds or current credit balances, and receive stock recommendations.

In 1985-86 in Ralston High School, Ralston, Nebraska, 65 investors purchased 50 shares of stock from six different corporations for a total investment of $1,059. The net proceeds (selling the stock

minus commission and taxes) for the six-month period was $256.38. The rate of return on the students' investment was between 10 and 15 percent. Confirmation of the purchases, number of shares, and the commission paid are sent to the investors within eight days from dates of purchase.

The list of stockholders and the stock information should be published in the school newspaper, the local newspaper, and the community newsletter. Radio stations and television stations should be informed of the project in an effort to get more publicity.

The investors should hold their stocks until about two weeks before graduation. Individual investors can take turns giving periodic reports concerning the progress of the investments. The broker should be contacted, and a date should be set for selling all of the shares. The new proceeds (or loss) should be distributed to investors proportionally, according to their investment.

Example

An individual's investment divided by the total investment equals the individual's percentage of the final amount. If the individual invested 15 percent of the total, that individual would accept either 15 percent of the gain or of the loss. For the example in Ralston High School, if an individual invested $20, the formula would look like this

$$\frac{\$20}{\$1{,}059} = 1.89\% \times \$256.38 \text{ (new proceeds)} = \$4.85 \text{ earned}$$

This investor would receive $24.85 (original investment plus share of earnings).

Pay envelopes should be prepared in advance. The envelopes contain students' contracts showing the amounts of their investments. When the shares are liquidated, investors are paid their investment amount—plus their share of the net proceeds or minus their share of the net loss. It is an exciting time for students and teacher.

(Adapted from Deloss C. Smith, "Business/Criminal/Civil Law Is for Everyone," *Tips*, Delta Pi Epsilon 3:4, Fall 1987.)

Contemporary Vocational Education Programs 9

Contemporary vocational education programs involve an assessment of pupil needs, in light of labor market information and student follow-up studies, and a curriculum developed to foster students' mastery of vocational skills. Contemporary vocational programs based on labor market information and student needs should be accessible to all Wisconsin youth, including the college bound; yet the Department of Public Instruction finds that only about 17 percent of Wisconsin's high school students complete a vocational program. Considering that 60 percent of youth enter the labor force at or before graduation and another 15 percent enter vocational school programs, according to DPI figures, the need for contemporary high school vocational education is critical. University of Wisconsin-Stout evaluations of federally funded vocational programs consistently show students who take vocational programs acquire competencies important for employment, have an edge in the hiring process, tend to have more job stability, are more confident of their own abilities, and tend to be more satisfied with their high school work preparation.

Vocational training must be given greater emphasis; it will not be less important in the world of work of the future. Through program offerings based on labor market and student needs, and using curriculums developed in conjunction with the vocational, technical, and adult education system and business and industry, vocational programs can give students relevant occupational skill training.

Historically, vocational educators have been expected to teach all employment skills, but no longer should it be assumed that vocational programs alone can provide the depth and breadth of training needed. Education for employment fixes responsibility for this task with all elementary and secondary educators as the total school becomes involved in preparing students for the changing needs of the work place. Education for employment programs need to establish critical partnerships with business and industry and the Vocational, Technical and Adult Education (VTAE) System in a cooperative effort to make training up-to-date and to make curriculums cost-effective and available for all youth.

Wisconsin elementary and secondary schools must offer all students a thorough grounding, not only in language skills, reasoning, and mathematics, but also in the fundamental mechanical and technical skills and work habits they will need during their working lives. Employers say students also need to learn positive attitudes toward work and appropriate behavior on the job. Employers seek people who know how to learn, solve problems, make decisions, and set priorities. Vocational education programs provide a setting in which students who are action-oriented in their approach to learning can more readily master the basic mathematics, science, and communication skills as they are integrated and applied in vocational coursework.

Vocational student organizations (VSOs) emphasize "learning by doing." By providing practical experiences to students, VSOs have helped to build a work force dedicated to meeting the job market needs of our state. In addition to developing skills, attitudes, and knowledge essential to success in business, industry, agriculture, and family life, VSOs promote leadership, cooperation, citizenship, and social skills essential to individual development. VSOs develop citizens who contribute to the economic development of the communities in which they live and work.

Each VSO sponsors workshops and conferences that develop and evaluate the occupational proficiency of students. VSOs are also intracurricular and they support, enhance, and develop skills necessary for success. They provide members with opportunities to develop their potential so that they can function as productive members of our society. Major VSOs operating in Wisconsin include

- Distributive Education Clubs of America (DECA) for marketing education,
- Future Business Leaders of America (FBLA) for business education,
- Future Farmers of America (FFA) for agriculture education,
- Future Homemakers of America/Home Economics-Related Occupations (FHA-HERO) for family and consumer education, and
- Vocational Industrial Clubs of America (VICA) for technology education.

State Goals and Activities

The Bureau for Vocational Education, Wisconsin Department of Public Instruction (DPI), has developed goals and activities specifically designed to provide access and opportunities for all students to contemporary vocational education programs that incorporate the elements of education for employment. The new direction for vocational education combines basic academics and employability skills with entry-level job readiness.

Establish New Curriculum Directions

- Publish and disseminate curriculum guides.
- Target funding to complete printing and pilot testing of each new curriculum guide.
- Coordinate state and local project funding for development of new curriculum directions with a staff development component.
- Direct funding toward full implementation of new directions, including assistance in purchasing new equipment, supplies, or special services.
- Provide inservice and promotion of the Wisconsin Developmental Guidance Model* to encourage career awareness in K-12.
- Design a middle/junior high school survey curriculum that focuses on career exploration, awareness, and development of employability skills and positive work attitudes.
- Provide technical assistance in the use of labor market information and of needs assessments to plan appropriate occupational preparation offerings.

Provide Staff Development and Curriculum Resources

- Administer Occupational Competency Program funding and organization to provide teacher inservice training at job sites.
- Encourage membership in professional organizations.
- Facilitate cooperative educational service agency (CESA) curriculum workshops.
- Design and disseminate inservice models and other strategies for cooperation including provision of services to special needs populations.
- Fund, organize, and direct DPI state-level training projects.
- Coordinate DPI curriculum projects with state universities' teacher training programs.
- Establish clockhour equivalency for all development activities.

*Wisconsin Department of Public Instruction, *School Counseling Programs: A Resource and Planning Guide* (Madison, WI: Department of Public Instruction, 1986).

- Other.
  - Conferences
  - Project workshops on school sites
  - Articles in professional journals
  - On-site visits and program evaluations

Articulate Programs and Curriculum Offerings

- Implement cooperative State Board of Vocational, Technical and Adult Education (SBVTAE)/DPI program designed to establish articulated programs in vocational education that provide for advanced standing in all VTAE districts and secondary schools.
- Develop strategies and evaluative criteria dealing with uses of articulated programs and provide for dissemination and adoption/adaptation by additional VTAE/local educational agency (LEA) districts.
- Assist in funding the development of advanced skill programs such as "tech prep" and "1 + 2" or "2 + 2" programs where labor market needs are supportive.
- Join the national consortium developing basic mathematics and communication arts learning units that incorporate basic skills improvement into the vocational curriculum.
- Promote regional articulation committees between area vocational schools and local school districts.
- Strengthen liaison between DPI vocational staff and the SBVTAE staff.
- Fund articulation projects at the local district level to establish *horizontal articulation* among general education, vocational education, Jobs Training Partnership Act (JTPA), education for employment, career education, and guidance and counseling.

Serve At-Risk and Special Needs Student Populations

- Assist at-risk and special needs student populations through funding various activities.
  - Provide support services for *handicapped* and *disadvantaged* youth to assist them in benefiting from vocational education.
  - Provide assistance to *single parents* to enable them to return to school to complete their high school education and prepare for employment.
  - Provide assistance to *incarcerated* youth in gaining occupational skills that permit them to enter the work force upon release from confinement.
  - Provide assistance to *dropouts* in returning to school to receive occupational skills training and completion of high school diploma.
  - Disseminate vocational curriculum developed for *special needs* learners to all vocational educators through JTPA-funded programs.
- Work with Department of Health and Social Services (DHSS), Department of Industry, Labor and Human Relations (DILHR), SBVTAE, and other state agencies to coordinate employment training programs, services, and expenditures.
- Provide technical assistance to LEAs to ensure instructional support services are provided to special needs students enrolled in vocational education.
- Work in liaison with the State Job Training Coordinating Council, the Wisconsin Council on Vocational Education, and other commissions that serve special needs populations.
- Coordinate provision of special needs services within DPI, including those of the Bureau for Pupil Services, Office for School Improvement, Bureau for Exceptional Children, and Bureau for Vocational Education in the implementation of children at risk and education for employment programs under the following authorities:
  - Carl D. Perkins Vocational Education Act
  - Education of the Handicapped Act
  - Equal Educational Opportunity (s. 118.13, Wis. Stats.)
  - DPI resource and planning guides
  - DHSS Youth Employment Task Force
  - Business and Industry Partnership Council

- Wisconsin Council on Vocational Education
- Education for employment initiatives
- JTPA
- Children At Risk programs
- graduation standards
- State Job Coordinating Council
- Private Industry Council
- Chapter 1 programs

Improve Basic Skills in Vocational Education

- Disseminate principles of technology curriculum materials and promote the use of materials by science teachers as well as vocational teachers. Involve consultants from the Bureau for Vocational Education and the Bureau for Program Improvement in the development and field testing of this effort.
- Participate in the development of a curriculum in applied mathematics to provide mathematics and vocational teachers with a media-based, field-tested program for improving basic skills in mathematics. Involve personnel from the Bureau for Vocational Education and the Bureau for Program Improvement in the development and field testing of this effort.
- Participate in the development of a curriculum in applied communications to provide English and vocational teachers with a media-based, field-tested curriculum for improving communication skills. Involve personnel from the Bureau for Vocational Education and the Bureau for Program Improvement in the development and field testing of this effort.
- Develop and disseminate models of programs that integrate basic skills instruction, vocational education, and employability skills.

Increase Business and Industry Partnerships

- Establish the Governor's Council on Business and Education Partnerships as a clearinghouse for partnership information that can be accessed by districts wanting to establish partnerships.
- Utilize the Council to promote the advantages of partnerships to the private sector through such organizations as the Wisconsin Association of Manufacturers and Commerce, the Department of Development, service delivery area private industry councils, chambers of commerce, and local education for employment councils.
- Develop and disseminate a handbook on how to establish partnership relationships. The manual should include resources such as contact persons who currently have good partnerships.
- Develop and disseminate a work experience resource guide to facilitate school-supervised work experiences in the public and private sector.
- Develop and disseminate program models that facilitate local school district establishment of partnerships with business and industry.

Program for Equal Access

- Review and modify curriculum content and program standards for each vocational discipline to assure equity and equal access.
- Provide staff development activities to increase the ability of educators to provide equity and equal access for all students.
- Design needs assessment and evaluation formats to promote infusion of equity and equal access strategies in vocational education programming.
- Fund demonstration projects that can serve as models for implementing equity and equal access.
- Increase access and participation in vocational education to assist youth in becoming economically self-sufficient and in being able to balance the dual work roles of homemaker/parent and wage earner.
- Work cooperatively with guidance programs to disseminate information encouraging all students to participate in vocational education without limitations based on role stereotyping or bias.

- Involve representatives of specials needs populations in implementation of curriculum and programming to ensure that the needs of all students are being served.

Enumerating these goals and activities is just one of the steps Wisconsin has taken to meet the challenges of both restoring academic excellence and of meeting the needs of employers for a quality work force. Recent legislative standards set definitions for both the academic and vocational education preparation that students can expect in all Wisconsin public schools. The state also passed legislation supporting and emphasizing the expectation that secondary schools will provide vocational education opportunities. Furthermore, as a result of the Parker Project survey of the private sector and the evaluation of vocational programs in Wisconsin high schools (explained in Section 1), the state superintendent has called for a plan showing how Wisconsin's public schools can better prepare students to enter the world of work or pursue postsecondary education. Contemporary vocational education programs play a significant role in the development of that plan.

Components of Local Vocational Education Programs

- A flexible program is maintained in order to adjust and respond to changes in labor market analyses.
- Programs actively involve representatives of a variety of interest groups including K-12 school personnel, student organizations, the private sector, community representatives, and area VTAE staff/administration.
- All students have access to programs regardless of sex, ethnicity, socio-economic status, or handicap.
- All program areas are equally emphasized (agriculture education, business education, health occupations, home economics, marketing, technology education, etc.).
- Community resources are used effectively in all areas.
- Labor market information and student needs are assessed and data is collected and analyzed so that school education and training programs are designed and updated to enhance students' employability in local and regional labor markets.
- Program areas provide students with an understanding of the range and nature of available occupations and their required skills and abilities.
- Programs encourage positive work attitudes and habits.

Career Awareness in Agriculture (Elementary)

Purposes: Students will

- be aware of the vast opportunities for employment in the fields of agriculture and natural resources, and
- explore opportunities in related fields where knowledge of agriculture is both relative and beneficial.

Bring in telephone books and have students research local businesses with opportunities for agriculture employment. Contact selected businesses and invite agriculture workers into your classroom as guest speakers or resource persons to discuss the background and opportunities in their field. Take students on a field trip to see agriculture workers and observe what jobs they do and what skills are required. Students may then select a career of interest and do further research and report on background, skills, and opportunities for employment in the specific position.

Cooperation Versus Competition (Middle School)

Purposes: Students will

- investigate a definition of "cooperation" and of "competition," and
- examine family actions and actions in the workplace that tend to emphasize cooperative and competitive orientations.

- Have students list on a board, transparency, or flip chart descriptive words for both *cooperation* and *competition*. When everyone's responses have been recorded, students write down the five words that most accurately describe *cooperation* to them. Next the students make a comparable list describing *competition*.

Form groups of three to five students and identify a recorder in each. The small groups are to each cooperatively compile a list of seven words that describe *cooperation* and a list for *competition*. Considering these lists, each group writes a definition for each of the two concepts.

Entire class meets as large group and all definitions are shared. Through cooperative efforts, facilitate the class in writing a class definition for each term. Instruct students to reflect on the activity and identify examples of when individuals were cooperating and when competitive acts took place. Students are asked to explain how *cooperation* and *competition* influence an individual's attitude and actions.

- Have students read a case study describing a HERO student's experiences on the job in a food service establishment (included). Discuss the case study in small groups.
- Students list family actions that tend to emphasize cooperative qualities and those that emphasize competition. Discuss the following questions:

-Is competition in the workplace usually good? When might it be a disadvantage?
-How can cooperative traits learned in the family influence the workplace?
-Are there traits learned in the workplace that also influence the family? How?
-How do family influences carry over to the workplace?

- Assign students to respond in writing to the following:

It is now 2005, and you have a family of your own. What are some things to think about as your family prepares its members to enter the workplace?

Case Study

Jim has been working as a HERO cooperative education student at the East Side Cafe for seven months. His responsibilities as an assistant cook include initial steps in food preparation, maintaining safety and sanitation standards, and providing friendly service to customers. Jim enjoys his work at the restaurant and plans to attend postsecondary training to become a chef.

Recently Jim did not receive a pay increase he had been working towards. During a break Jim learns that Laurie, another part-time employee, received a pay increase even though she started work one month after him. The next week Jim did not seem to look forward to his work at the restaurant and found it difficult to be friendly to his fellow workers. In the past Jim would willingly help Laurie and answer questions other new employees asked. Now he feels like he is competing with them. Jim's co-workers have noticed a change in his attitude. Unhappy with his work situation, Jim has decided to make an appointment with his HERO coordinator and discuss quitting his job.

Economic Foundations and Product Planning (Secondary)

Purposes: Students will

- utilize business and economic terms,
- identify business development potential,
- predict future direction of a business,
- explain the concept of competition, and
- develop a marketing plan.

After discussing economics and its impact on product planning, have students solve a case problem (included) that will demonstrate their understanding of the activity objectives. Divide the class into small groups of 5-8 students. Each small group will develop a skit that depicts the situation. Select two groups to role-play their solutions to the entire class. Follow with a large-group discussion emphasizing the objectives.

Case Problem

You are a sales representative for the Car Cool Corporation, a wholesale company in Wisconsin. Your company has just begun distributing a new product, "Auto Sunscreen."

The sunscreen is an accordian-pleated cardboard panel that protects dashboards and upholstery from damaging solar rays, which also means no more toasted legs from hot upholstery. The manufacturer claims it keeps cars 30 percent cooler under the midday sun. Sunscreens come in three seasonal designs: a sun, a sailboat, and sunglasses. You can also get three-dimensional images. The screen becomes an emergency road sign when the flip side is displayed through your car's rear window or open trunk. Retail prices for standard designs are $4 each; three-dimensional images are $5 each. Wholesale prices for standard designs are $2.50; three-dimensional images are $3.50 each.

The company sales manager has asked you to design a market plan for this product that considers the following:

- Who is the target market (ultimate consumer) for this product?
- What are competitive products?
- What are the top two features and benefits that the consumer will find important?
- To what types of businesses and/or retailers should this product be distributed?
- What means of promotion by the manufacturer should be used to assist the retailer in promoting the product to the final consumer?

You are to make a verbal presentation to Chris Jacobs, company sales manager, regarding the information you have been asked to present. You may include additional information. You may use notes in the presentation if you desire. The meeting will begin after Chris Jacobs greets you.

Information Processing in Business Education (Secondary)

Purposes: Students will

- demonstrate knowledge of a block style letter,
- demonstrate knowledge of a letter of application,
- demonstrate ability to key copy in proper format, and
- perform activity in the time determined by the instructor.

Have a speaker from the business community speak to the class concerning what should be included in a letter of application for a job. Then, have students, using the information listed below, compose a letter of application in block style. The copy should be error free. Use the current date and personal address for the return address. The following criteria should be used:

- The student must apply for a business or business-related job. The job must be one for which he/she is now qualified or for which he/she will be qualified at the completion of the current school year.
- The student will address the one-page letter of application for employment to:

  Dale Thomas
  Personnel Director
  Merit Corporation
  1640 Franklin Place
  Madison, WI 53707

Merit Corporation is a large corporation whose benefits include paid holidays and vacations, sick leave, a retirement plan, and health insurance. Salary will be commensurate with experience and education. Merit is an equal opportunity employer.

At the end of the activity, ask a business representative to review the sample letters of application and provide feedback to the students on how to improve the letters.

Appendixes 10

A. *The Education for Employment Administrative Rule*

B. *Teacher Preparation Standards*

C. *Demonstration Grants Report*

D. *Collecting and Using Labor Market Information*

E. *Sample Student Follow-Up Survey Form*

F. *School/Business Partnership Resources*

G. *Economics Education Resources*

H. *Questions and Answers about Education for Employment*

I. *Suggested Reading List*

Appendix A

The Education for Employment Administrative Rule

SECTION 20. PI 8.01(2)(m) is repealed and recreated to read:

PI 8.01(2)(m) Education for Employment. Each school district board shall comply with s. 121.02(1)(m), Stats., and ch. PI 26, relating to education for employment. (Each school district shall provide access to an education for employment program that has been approved by the state superintendent.)

SECTION 24. Chapter PI 26 is created to read:

CHAPTER PI 26
EDUCATION FOR EMPLOYMENT PLANS AND PROGRAM REQUIREMENTS

PI 26.01 Applicability and purpose. Under s. 121.02(1)(m), Stats., beginning in the 1991-1992 school year, every board shall provide access to an education for employment program approved by the state superintendent. The purpose of education for employment programs is to prepare elementary and secondary pupils for employment, to promote cooperation between business and industry and public schools, and to establish a role for public schools in the economic development of Wisconsin. This chapter defines education for employment programs, describes the process for approval of education for employment plans, and establishes approval criteria for education for employment programs.

PI 26.02 Definitions. In this chapter:

(1) "Basic skills" means reading, language arts, mathematics, science and social studies concepts and skills.

(2) "Board" means the school board in charge of the public schools of the district.

(3) "Business and education partnerships" means formal cooperative relationships between public schools and school districts and businesses which benefit and involve pupils, professional staff, the school district, businesses, and the community.

(4) "Career exploration and planning" means the process by which elementary and secondary pupils identify and evaluate life and work choices, explore and plan career goals, and acquire realistic life and work decision-making skills.

(5) "CESA" means a cooperative educational service agency under ch. 116, Stats.

(6) "Community field experience" means learning about work and other life roles by studying, observing and performing them, and it involves expanding educational environments to places where these roles occur.

(7) "Department" means the Wisconsin department of public instruction.

(8) "Employability skills and attitudes" means the cognitive and affective skills needed by pupils to obtain and retain employment, and which are applicable and transferable to general employment situations.

(9) "School supervised work experience" means a set of planned educational experiences, supervised by licensed school personnel, designed to enable learners to acquire attitudes, skills and knowledge for work and other life roles by participating in actual or simulated work settings related to in-school instructional programs.

(10) "State superintendent" means the state superintendent of public instruction.

(11) "Study of economics and American economic institutions " means the study of economics including business, industry, labor, and agricultural operations and organizations and their role in a local, state, national and international economy; entrepreneurship and entrepreneurial skills; consumer and household economics; and the role of citizens in a local, state, national, and international economy.

(12) "Vocational education" means instructional programs designed to achieve pupil mastery of the skills set forth in s. 118.01(2)(b), Stats.

PI 26.03 General requirements for school board programs for education for employment. Under s. 121.02 (1)(m), Stats., by September 1, 1991, and thereafter, every board shall have an education for employment program for elementary and secondary pupils which has been approved by the state superintendent under

s. PI 26.04. To be approved, a program shall meet all of the following requirements:

(1) The board shall appoint a districtwide education for employment council or participate in a CESA education for employment council, or participate in an education for employment council established through a s. 66.30, Stats., agreement among 2 or more boards. At least half the council shall be composed of employers who are representative of a cross section of the district or regional labor market. The remainder shall be composed of teachers, administrators, pupil services personnel, board members, pupils, parents, representatives of organized labor, representatives of job training partnership councils, and representatives of district vocational and technical institutes or colleges. The council shall be representative of the population in the district or region, including females, minorities and disabled persons.

(2) The program shall be operated in accordance with an education for employment plan developed by the council and approved by the board by September 1, 1989. The program's long range plan shall be defined in incremental steps and the plan shall be implemented by September 1, 1991. The plan shall be based on pupil needs and interests, equality of educational opportunity, labor market information, impact on economic development and job creation, employment needs, periodic follow-up studies of graduates, and an evaluation of current programs and staff development needs. The plan shall be reviewed annually by the education for employment council and revised, if necessary, at least once every 5 years.

(3) The board shall designate a staff person to coordinate the education for employment program.

(4) All pupils in grades kindergarten through 12 shall have access to an education for employment program which provides for the following:

(a) Instruction which provides for the practical application of basic skills in the general and vocational curricula.

(b) School-supervised work experience. Work experience may include community field experiences relating to work in grades kindergarten through grade 12, more specific occupational training in grades 7 through 12, and paid work experience in grades 10 through 12.

(c) Career exploration and planning which also addresses sex-role stereotyping in career decision making.

(d) Instruction in employability skills and attitudes.

(e) The study of the practical application of economics and American economic institutions, including entrepreneurship education and the knowledge needed to begin and operate a business.

(5) All pupils in grades 9 through 12 shall have access to vocational education programs which have an appropriate curriculum based on labor market information including follow-up studies of graduates on the basis of race, sex and handicapping condition, job placement and employment needs.

(6) The board shall maintain information on pupil participation in the education for employment program by race, sex and disability.

(7) The board shall establish a business and education partnership council to encourage the development of business and education partnerships. The education for employment council established under sub. (1) may serve as the business and education partnership council.

(8) The board shall integrate other educational program requirements into the education for employment program, including those found in the school district standards under s. 121.02(1), Stats., vocational skills required under s. 118.01 (2)(b), Stats., high school graduation requirements under s. 118.33, Stats., and programs for children at risk under s. 118.153, Stats.

(9) The board shall coordinate the education for employment program with other public school districts; CESAs; vocational technical institutes and colleges; and job training programs.

PI 26.04 Approval of education for employment programs. The state superintendent shall review school district education for employment plans during the school district standards compliance audits under s. PI 8.02. The state superintendent shall approve a program if it meets all of the requirements of s. PI 26.03.

Appendix B

Teacher Preparation Standards

The effort to attain economic development through educating the finest, most skilled work force in America requires that teachers, administrators, and other professional educators be prepared in

- business and education partnerships;
- practical application of the basic skills;
- career exploration, planning, and decision making;
- employability skills and attitudes;
- school supervised work experiences;
- knowledge of business operations and economics; and
- contemporary vocational education programs.

Therefore, the state superintendent has by rule established college and university program approval standards for the preparation of teachers seeking licenses for service in Wisconsin public schools. These standards affect all elementary, secondary, economics, vocational education, and school counselor preparation programs as follows:

PI 4.11 ELEMENTARY EDUCATION.

All professional education programs leading to certification in elementary education shall meet the following standards:

(7) The program shall require study of program, curriculum, and instructional approaches which contribute to the preparation of pupils for work including career exploration, practical application of the basic skills, economics and American economic institutions, and employability skills and attitudes.

PI 4.12 SECONDARY EDUCATION.

All professional education programs leading to certification in secondary education shall meet the following standards:

(6) The program shall require study of program, curriculum, and instructional approaches which contribute to the preparation of pupils for work including career exploration and planning; practical application of the basic skills; employability skills and attitudes; knowledge of economics and American economic institutions including business operations, agriculture, and labor; entrepreneurship; and the development of specific occupational skills.

PI 4.24 ECONOMICS.

A professional education program leading to certification in economics shall meet the following standards (in addition to the standards in PI 4.12):

(1) The program shall require study of the American economic system and institutions, including business, agriculture and labor, and alternative economic systems.

PI 4.54 VOCATIONAL EDUCATION.

A professional education program leading to certification in vocational education shall meet the following standards (in addition to the standards in PI 4.12):

(2) The program shall require study of the application and integration of basic communication skills, social sciences, science, mathematics, and computer literacy skills in the vocational education curriculum.

(3) The program shall require study of the relationship of vocational education to the entire program of elementary, middle, and secondary education; postsecondary education; and various professional fields.

(4) The program shall require study and experience to develop the ability to plan, coordinate and evaluate work experience programs.

(8) The program shall require the study of economics and American economic institutions including business operations, agriculture and labor; labor market information; economic development; and job creation.

(9) The program shall require study of career exploration, planning, and development, including employability skills and attitudes.

PI 4.71 SCHOOL COUNSELING.

A professional education program leading to certification in school counseling shall meet the following standards:

(4) The program shall require the study of career development theories and practices; the range of career choices; decision-making skills; and the use of this knowledge as it relates to a lifelong process of education, training, and work. In addition, all teachers who expect to be licensed in Wisconsin, including those who have been prepared outside the state, shall complete the following certification requirements:

PI 3.07 ELEMENTARY LEVEL EDUCATION: GRADES 1-9.

(3) An applicant who completed an initial professional education program after August 31, 1990, shall have coursework in program, curriculum, and instructional approaches which contribute to the preparation of pupils for work including career explorations, practical application of the basic skills, economics and American economic institutions, and employability skills and attitudes.

PI 3.085 SECONDARY LEVEL EDUCATION: GRADES 5-12.

(2) An applicant who completed an initial professional education program after August 31, 1990, shall have coursework in program, curriculum, and instructional approaches which contribute to the preparation of pupils for work including career exploration and planning; practical application of the basic skills; employability skills and attitudes; knowledge of economics and American economic institutions, including business operations, agriculture, and labor; entrepreneurship; and the development of specific occupational skills.

Appendix C

Demonstration Grants Report

This report was submitted to the Wisconsin Legislature pursuant to Wisconsin Statutes 115.367(7)4. It reported on the status and effectiveness of the demonstration grants projects funded under this section after their first year of operation. It is reproduced here because it contains a wealth of practical, tested program and planning ideas for integrating education for employment programs in other areas.

Introduction

During the Governor's Special Legislative Session on Economic Development, the Legislature passed 1985 Wisconsin Act 75, authorizing the state superintendent of public instruction to make grants to school boards to fund education for employment projects. Projects eligible for funding were required to incorporate school-supervised work experience programs, business and education partnerships, and at least two of the following:

1. The practical application and integration of basic skills, economics, sciences, and computer literacy in both the general and vocational curriculum.

2. The study of economics and American economic institutions, including business operations, entrepreneurial skills, agriculture and labor organizations.

3. Career exploration, planning and guidance in grades kindergarten to 12.

4. Employability skills and attitudes in the elementary and secondary instructional program.

5. Vocational education programs that use contemporary curricula consistent with labor market and pupil needs.

With the advice of the Governor's Council on Business and Education Partnerships, the state superintendent selected five projects to receive funding.

These projects were:

1. The South Milwaukee School District ($58,500)

2. The Southern Wisconsin Education for Employment Program, Janesville ($108,000)

3. The Jefferson County Consortium Education for Employment Project, Watertown ($115,000)

4. The Cooperative Educational Service Agency (CESA) 9 Education for Employment Project, Tomahawk ($95,000)

5. The joint CESA 4 and CESA 10 Education for Employment Project, Osseo ($115,000)

The purpose of these demonstration grants was to provide models for statewide dissemination on how school districts can plan for, deliver, and evaluate education for employment programs. These models should be adaptable/adoptable by other districts. S. 121.02(1)(m), Wis. Stats., requires all school districts to provide access to an approved education for employment program by September 1, 1988.*

One of the projects, South Milwaukee, is being undertaken by a single school district. The remaining four projects were consortium agreements among several area schools. Two of the consortia, Janesville and Jefferson County, were formed for the purpose of this project, and the remaining two took advantage of existing CESA configurations. Participating districts in the Janesville consortium included Janesville, Whitewater, Beloit Turner, and Orfordville Parkview. The Jefferson County group included Lake Mills, Johnson Creek, Jefferson, and Watertown.

Project activities were to include an analysis of labor market information, student and community needs and funding for a business/education/community partnership steering committee to advise on project direction and products. Fundable project

*This date has been changed to September 1, 1989.

activities included consultant fees; extended contract and release time for teachers for curriculum and program development work; staff development activities, including inservice and release time for inservices; costs for materials and equipment; pupil and teacher transportation; work experience coordination; and project evaluation.

Wisconsin Act 75 stipulated that not more than 20 percent of each grant awarded could be spent on transportation or equipment. It further required a budgeted local match of 10 percent the first year, of 40 percent if an award is granted the second year, and of 70 percent if an award is granted the third year. Districts applying for these grants should demonstrate a strong local commitment to continue the project after GPR funding is completed.

The funded projects were written for one year with a three-year plan for implementation. Continued success for these projects depends heavily on continued state support in future years. The timetable of activities for these projects began July 1, 1986. Due to the structure of school calendars, however, most projects were not fully operational until the fall. This report, therefore, represents approximately three months of actual project operation.

This report will describe the activities of each of the five pilot projects in three sections. The first section will outline the contractual conditions under which the grant proposal was accepted. The second section will summarize current project activities and relate these activities to the project goals to determine the effectiveness of the project. The third section will be a look to future plans for each of the projects—plans for this year as well as plans for the next two years in the project cycle.

The Jefferson County Consortium

Karen Prickette, Director, (414) 261-2373

Contractual Conditions

The following conditions were listed in the letter notifying the applicant of the award, and these conditions were added to the project goals:

1. Detail the Education for Employment Council composition. It should include at least half business and industry representatives of a cross section of the district or regional labor market. The remainder should represent teachers, administrators, counselors, board members, pupils, parents, organized labor, representatives of job training partnership councils, and representatives of district vocational and technical institutes or colleges.
2. Hold a training/planning workshop for the Education for Employment Council.
3. Meet with the Education for Employment Council at least four times during this funding cycle.
4. Include the Education for Employment Council as part of the ongoing evaluation of project progress.
5. Provide clarity for work experience and partnership components.
6. Provide an education for employment progress report to the Department of Public Instruction by November 15, 1986.

Project Activities

Six of seven goals have been attended to up to the time of this report. These six are summarized below.

Goal 1—Business Education Partnerships

- Education for Employment Council

The council includes representatives from the four school districts plus four *ex officio* district designees. All three legislators (Senator Lorman, Representatives Lewis and Ratke) agreed to serve on the council. The VTAE System is represented by Lynette Hertel, Watertown Campus Coordinator, and Don Fry, District 4 VTAE Board of Directors. Fry also represents the Jefferson County Labor Union and is a member of our local Private Industry Council. Manufacturing, retail, service, agribusiness, and media members represent the business community. Jackie Wenkman of Opportunities, Inc., represents the handicapped population, and Dave Chapman represents

social services. Elementary, middle school, and secondary teachers are on the council as well as Board of Education members. Not only is there an equal number of males and females, but 50% of the members are business and industry employee representatives.

The Education for Employment Plan was evaluated by the council, presented by the project director to all four school boards, and approved.

A January education for employment council meeting will further evaluate that plan. Also Mary Lou Linton of the Governor's Council on Business/Education Partnerships will address the council.

- Planning Conference

The council, along with key community business people identified by the council, participated in a one-day planning conference facilitated by Bruce Williams of the Institute of Cultural Affairs. At this conference, the background and support statements were given by Alfred Diotte, chairman of the Governor's Council; Glenn Davison, assistant director of the Wisconsin VTAE System, our Jefferson County legislators, and Dr. Grover, State Superintendent of Public Instruction.

Through an interactive process, participants communicated activities and plans and voiced the barriers to their ideas. In the afternoon the four districts met separately to develop long-range plans to meet their needs using input from the morning sessions. Evaluations of the one-day conference were excellent.

Since the conferences, local partnership activities have been developed. Lake Mills educators coordinated a breakfast meeting with area businesses during American Education Week. Watertown is developing partnerships through the Business Industry and Education Committee of the Chamber of Commerce. Currently underway is the development of a community-resource booklet to identify business supporters of field trips, speakers, job shadow experiences, tutors, and mentors. The project director, Karen Prickette, has been speaking at meetings of service organizations about this booklet and about the Education for Employment Program. A Career Day for all high school students will be the first to utilize this booklet, but the emphasis is on K-12 classroom needs.

Video equipment has been purchased for the four school districts. The scripting of the video overview of business and industry in each community is being assigned and ideas are being gathered.

The Johnson Creek School District, the smallest district, has 530 students. The first partnership meeting was pulled together and explained as an "umbrella concept." To avoid overusing their local business and community people, they incorporated many existing programs, which require committees with the education for employment concept, and added the at-large community representatives and K-8 representatives. This partnership group now advises K-12 and spreads their expertise more broadly.

These groups have laid the groundwork for the individual partnership activities which happen in each goal and between individual classroom and business/community representatives.

The director attended the Third National Symposium on Partnerships in Education, October 30-November 2, 1986. From that conference some of the partnership ideas previously mentioned were developed. The willingness of business people to become involved in education and support it through that involvement was very impressive.

In speaking with business employers and educators nationwide, the director found that they were most impressed by our Wisconsin Education for Employment Standard and desired more information about it because it seemed a much more coordinated effort than the isolated types of partnerships brought about by their "Adopt-a-School" programs. Some of the Adopt-a-School programs and Partners-In-Education, or whatever title they gave it, were limited artificial attempts to tie up a business with a school. Some were struggling to revitalize their relationship after being linked for 6-10 years. Exposure to other ideas—the tutor programs and other related activities—that have been successful, have been very useful.

Goal 2—Basic Skills

Renewed emphasis on acquisition and utilization of basic skills as well as practical application and transfer of basic skills to the work place has two components.

- Curriculum Work

A good way to handle curriculum work for education for employment would be in the normal curriculum revision or writing cycles in each district. In some consortium districts these coincided, and in others, they did not.

The project director met with curriculum directors or persons in charge of mathematics, reading, and language arts curriculum in all districts to outline ways to update curriculum to include education for employment objectives and activities.

The format will include identifying existing objectives and goals within the curriculum that relate to education for employment and adding new objectives where necessary. An addendum will then be developed to provide education for employment activities to carry out those goals.

- Basic Skills Tutor Centers

Basic skills tutors centers in the three high schools which do not have them will be added during the second semester. Administrators have developed plans for staffing these and for identifying students who need additional help in basic skills. These experimental basic skills tutor centers will show the need for districts to fund and staff these centers in future years. Development of basic skills centers as part of career exploration centers may be an efficient way to help students see the need for basic skills in a chosen career and get extra help when needed.

Goal 3—Employability Skills and Attitudes

Two components are currently in operation.

- Curriculum Work

Staff meetings have been scheduled in all elementary schools to present the Education for Employment Program and to outline the reasons and format for documenting classroom strategies used to develop employability skills and attitudes.

Elementary school (K-6) weekend work experiences, letters, and evaluation forms for parents have been designed and printed to carry the Education for Employment Program into the home. These will be coordinated with the help of the classroom teacher.

- Videotape Production

Videotape production is getting started. Staff members are being given instruction in the use of the equipment which was bid and received in December. Several videos are near completion:

1. A hardware store owner talks about his business and what skills are necessary to work in that business.
2. A grocery store video shows three situations in which employees demonstrate good work attitudes and relate these back to attitudes learned and practices in the classroom.

Goal 4—School-Supervised Work Experience

There are four characteristics in this area.

- In-School Supervised Work Experience

Experiences are being structured and evaluated at all levels, K-12. These experiences include classroom jobs, library aides, tutors, office helpers, custodial helpers, etc. Wherever a certified teacher is working with a student, a skill objective/job description, an orientation procedure, and an evaluation are requested. These can be used, not only to document that activity, but also to give the student a structured work experience and an evaluation he/she might use in applying for future jobs or for writing a resume.

- Grades 6-8 Work Experience Discussions

  Middle school and junior high students will be approached through advisor/advisee programs or during noon hour and study halls in an attempt to discuss part-time job skills and attitudes at that age.

- High School-Expanded Opportunities

  High school students will be provided work experience through vocational cooperative programs, JTPA programs, and job shadow experiences.

- Field Trip Study Guides

  During second semester field trip guides will be developed which reflect how basic skills apply to the work experience. These guides will make field trips far more valuable. In addition to looking at the product or business, they will enable the teacher and employer to address employability skills, work attitudes, basic skills, and specialized skills, thus adding a new dimension to field trips.

Goal 5—Developmental Guidance

Career exploration and planning will be organized for students through a developmental guidance approach. Guidance curriculum committees have begun meeting to work on a developmental guidance plan based on the DPI model. Surveys are being designed to identify what areas are already being stressed and expanded in all grades and areas of the curriculum so that second semester work will concentrate on deficiencies.

Goal 6—Vocational Education Job Skills

This goal stresses flexibility and follow up.

Vocational equity guidelines have been introduced in some of the districts. Follow-up studies and business surveys are being done in most of the districts, and each district is implementing its vocational program according to the long-range plan. In September the JTPA consortium was addressed about the relationship of education for employment goals with the purpose of their program.

Future Plans

- Meetings

January 14: Project director will explain education for employment at the VTAE District 4 Articulation Committee Meeting.

January 21: A booth on education for employment will explain the program at the Wisconsin Association of School Boards convention. A display of what we are doing, pamphlets, and videotaped programs will be shown.

- Goals for the future include:

1. Work on Goal 7, which is the study of economics including business operations.
2. Improve academic performance, particularly in the basic skills area.
3. Have self-directed students studying for a purpose and toward a goal.
4. Use labor market information in the classroom and to make career decisions.
5. Improve interpersonal skills, particularly as they relate to getting and keeping careers and jobs.
6. Have job-ready students who understand the implications of life-long learning.
7. Share methods, materials, and experience with other schools or consortia so they can
   - set up an education for employment council, and
   - write a plan incorporating other funding sources.
8. Complete the Education for Employment Project Log, which addresses
   - timelines,
   - copies of letters, and
   - curriculum plan structures.
9. Complete some of the products of the work projects, including
   - video presentations,
   - updated curriculum guides,
   - work experience packets,
   - employability skills packets, and
   - field trip study guides.

Much groundwork has been done in the county with administrators, teachers, the council, and business people. People feel good about the Education for Employment Program and are giving it their full support.

The Southern Wisconsin Project

Ginny Krohn, Director, (608) 756-8325

Contractual Conditions

The letter notifying the applicant of the award contained the following conditions:

1. Detail the Education for Employment Council composition. It should include at least half business and industry representatives of a cross section of the district or regional labor market. The remainder should represent teachers, administrators, counselors, board members, pupils, parents, organized labor, representatives of job training partnership councils, and representatives of district vocational and technical institutes or colleges.
2. Meet with the Education for Employment Council at least four times during this funding cycle.
3. Include the Education for Employment Council as part of the ongoing evaluation of project progress.
4. Explain the total evaluation process.
5. Provide for an identification of key concepts and components for economics and knowledge of business operations.
6. Outline generally the overall strategic plan of when each component will be implemented K-12.
7. Explain the use of resource banks K-12.
8. Provide an education for employment progress report to the Department of Public Instruction by November 15, 1986.

Project Activities

Business Education Partnerships

- Teacher Survey

During the last week of November, all 933 teachers in the four districts were asked to respond to five questions about Business Education Partnerships. Two of the questions were taken directly from the Parker Project. To date 23 schools, 166 teachers, have responded; this is an 18% response rate. The majority of responses were from individuals who have had some exposure to the concept or have worked with business people on projects.

The majority (60%) said that they were interested in partnerships and would be interested in participating (55%) in an appropriate partnership activity. The form of partnership activity of most interest was "Shared Personal Expertise" and "One on One." A complete report of results includes the breakdown by district and subject area.

By comparison, the Parker Project shows that among business respondents, 34% had a linkage with a high school, but 71% indicated a willingness to get involved in exploring cooperative arrangements. The survey results will serve as a baseline. Project directors will be able to measure activity and attitude changes as this aspect of education for employment unfolds in the districts.

- Education for Employment Council

A meeting date for a S.W.E.E.P. meeting with the full council will be set for early in 1987. A progress report will be given and some goals for the 2nd semester will be set. Fifty members were selected representing all required categories. Six individuals have not responded to date.

- Local Advisory Committee Meetings

The following meetings were held:

Whitewater	
October 29, 1986	Bus Ed Adv Comm
Whitewater	
November 3, 1986	Goals Comm
Whitewater	
December 3, 1986	Bus Ed Adv Comm
Beloit Turner	
November 5, 1986	Voc Ed Adv Comm

Beloit Turner
December 3, 1986 Voc Ed Adv Comm
Parkview
November 4, 1986 Bus Ed Adv Comm
Janesville
November 11, 1986 Ch of Comm Ed Comm
Janesville
December 9, 1986 Ch of Comm Ed Comm

The next regularly scheduled meetings are:

Whitewater
January 14, 1987 Bus Ed Adv Comm
Beloit Turner
To be determined
Parkview
January 7, 1987 Bus Ed Adv Comm

Diploma Endorsement Project

Graduates of project high schools will be able to qualify for an Education for Employment endorsement along with their diploma. This endorsement will certify specific competencies, employability skills, and work attitudes have been met. A tentative list of criteria is given here.

To receive the Diploma Endorsement upon graduation, the student must meet the following criteria:

1. Attendance. Good school attendance with absences not to exceed five days in one year or 20 days in four years. Unexcused absences may not exceed one in one year or four in four years
2. Punctuality. Arrival at school, on time, with unexcused tardinesses not to exceed one in one year or four in four years.
3. Citizenship. Good citizenship in school with no serious infractions or suspensions.
4. Achievement. Maintain at least a C average (or equivalent) in the basic skills (English, science, social studies, mathematics).
5. Participation. In 12th grade, receive a faculty endorsement. The faculty certifies that the student has demonstrated the ability to
   - work with others,
   - be responsible,
   - be dependable and follow through on assignments,
   - communicate effectively with others—in writing and verbally,
   - accept supervision and advice,
   - maintain personal health,
   - recognize and solve problems by self,
   - show a satisfactory attitude,
   - perform beyond the stated assignment,*
   - show pride in his/her work,* and
   - show desire for improvement.*

**An ability necessary for job advancement.*

(Districts can add or subtract from this list. Receiving two-thirds positive responses is the minimum acceptable to receive the faculty endorsement.)

6. Resume. Has a resume on file that includes positive, verifiable references (with addresses and phone numbers) from four faculty members and at least one nonschool, unrelated adult.
7. Computer Literacy. Demonstrate applied computer literacy.
8. Work Experience. Within four years, complete a minimum number of hours of satisfactory work experience which is verified and supervised by the employer or supervisor *and* the parent or guardian. Minimum is defined as: 60 hours of volunteer work *or* 180 hours of paid work.
9. Career Awareness Within four years, complete and have on file a record of
   - assessment of own interests and abilities,
   - knowledge of careers which match interests and abilities,
   - knowledge of postsecondary training and educational opportunities matched to possible career interests, and
   - knowledge of regional labor market needs.

School-Supervised Work Experience

The research work of the S.W.E.E.P. pilot seems to be having a direct impact on the guidelines surrounding the school-supervised work experience. Preston Smeltzer, DPI voc ed special needs consultant, is writing these guidelines and was able to join in an interview with Laurence Steinberg, author of *When Teenagers Work*.

Steinberg's research defines parameters for teenage work and will be helpful as roles for parents and employers under the "work experience" portion of the plan are defined.

Vocational Education Curriculum

Under Janesville Foundation funding the vocational education teachers from Beloit Turner, Parkview, and Whitewater have been developing five-year plans for those districts with the help of Len Sterry and Bob Hendricks from UW-Stout. A progress report will be available to the CESA 2 Steering Committee on December 17. Sterry is well known throughout the state as the consultant for the Edgerton Tech Ed Curriculum. He has also been working on curriculum development with the CESAs 4 and 10 Education for Employment Pilot Project. He will continue to be a valuable resource for S.W.E.E.P.

Developmental Guidance

- Program Planning

  All four districts have made a commitment to the developmental guidance model. Under the same funding mentioned above, Beloit Turner, Parkview, and Whitewater have secured the consulting services of Pam Wilson, DPI guidance consultant and member of the Education for Employment Technical Assistance Team. Whitewater presented their program report to the school board last month.

  With all four districts, concern has been expressed about implementation at the high school level. This seems to parallel concerns voiced statewide. Again, we will be developing four models applicable to varying district sizes as we work.

- Janesville Chamber of Commerce "Career Fair" Idea Explored

  The idea of a "Career Fair" for Northern Rock County students has surfaced in the Education Committee of the Chamber of Commerce. The successful Stateline Career Expo (Beloit Turner and Parkview are involved) encouraged the committee to explore the possibility. An informal steering committee, co-chaired by Dick Sullivan of General Aviation and a Janesville district staff person will facilitate group discussion of the idea. An event is being planned which more directly fulfills the intent of the grant (no sex-role stereotyping, based on regional labor market information, parental involvement), as well as directly addresses those information needs which students expressed in the local needs assessment. If it is a "Career Fair with a Difference," it will serve as an additional activity for those students who now attend the fair at Beloit.

Employability Skills and Attitudes

Early in November, representatives from Parkview, Beloit Turner, and Janesville attended a Private Industry Council workshop on Pre-Employment Work Maturity Skills. They worked on developing lists of competencies for local students which reflect local employer expectations. The emphasis for this workshop, as with the other JTPA youth programs, will be on employability skills and job-seeking skills, not on-the-job training. This is consistent with and will be part of the education for employment district plans. Implementation by PIC is planned for March.

Practical Applications of the Basic Skills

Plans are underway to develop guidelines for a Resource Bank of Effective Teaching Strategies. This is part of a contract with the DPI to develop under the grant. A plan to contract with some districts for specific written products is being considered.

Future Plans

1. Finalize Diploma Endorsement criteria.
2. Continue study of work experience.
3. Progress with vocational education five-year plan.
4. Continue developmental guidance implementation.
5. Complete JTPA work maturity skills package.
6. Begin identification of a group of "gold collar" workers.
7. Develop K-8 attitudes project.

The CESA 9 Project

Steve Kain, Project Director, (715) 453-2141

Contractual Conditions

The following conditions were listed as part of the approval letter for this pilot:

1. Detail the Education for Employment Council composition. It should include at least half business and industry representatives of a cross section of the district or regional labor market. The remainder should represent teachers, administrators, counselors, board members, pupils, parents, organized labor, representatives of job training partnership councils, and representatives of district vocational and technical institutes or colleges.
2. Hold a training/planning workshop for the Education for Employment Council.
3. Meet with the Education for Employment Council at least four times during this funding cycle.
4. Teachers selected from grades K-12 should be a part of curriculum assessment, planning, and development as well as all orientation and project inservices.
5. Explain how business and education partnerships will be implemented in grades K-12.
6. Provide an education for employment progress report to the Department of Public Instruction by November 15, 1986.

Project Activities

Needs Assessment

The CESA #9 project is designed to demonstrate how schools in a CESA consortium can plan and develop an education for employment program. The project is focusing on needs assessment as a first step. We are surveying all 1986 graduates with questions designed to find out what they are actually doing, questions covering training received in the elements of education for employment, questions about future plans, and questions concerning preparation for work. The return from the surveys on two mailings was 51%. After tabulation by the University of Wisconsin-Stout, districts will receive both individual and composite reports and raw data containing written comments.

A second major emphasis of the needs assessment involves synthesis of labor market information and projections. The project will use information from a wide variety of resources to pull together a report tailored for each district as much as possible. State and national trends will also be included in these reports. The purpose of the reports is to provide information for districts to assess whether they are responding to the current labor market with their curriculum and to provide trends of the labor market to assist districts in projecting curriculum changes they need to consider over the next ten years.

The third part of the needs assessment will have districts assess the status of each of the elements of education for employment in their educational program. The status reports should point out to districts where gaps exist in their program.

Council Planning Workshop

A two-day orientation and planning meeting was held September 30 and October 1. Approximately 45 business, government, labor, and education representatives were in attendance. The outcome of this conference was an individual district plan, by quarter, designed from goals formulated during the conference. Individual districts have made modifications and updates based on other factors, such as coordination with School Evaluation Consortium programs already in place and refinement of district goals for education for employment. Most districts are forming local councils with business representatives for the purpose of developing local plans more specifically, defining local human resources, and informing the public.

Labor market information was also used to prepare a booklet for high school students. The booklet, "Use Your Education For Employment," is intended to assist students in career planning, outline the job-seeking process, and provide information about job openings and average wages.

During the remainder of this school year, staff will be working with local districts as a resource in developing curriculum related with the elements of education for employment, primarily with busi-

ness and education partnerships, school-supervised work experience, vocational education, and employability skills and attitudes.

Resource Center

A second goal of the CESA 9 project is to establish a resource center for education for employment. The following list of resources has been used in the development of the CESA 9 consortium education for employment project.

U.S. Department of Labor
- *Report 3: Social Indicators for Planning and Evaluation: 1980 Census of Population*
- *Monthly Labor Review, Bureau of Labor Statistics*, November, 1985

Department of Industry, Labor, and Human Relations, Madison, Wisconsin
- *Wisconsin Economic Indicators, Monthly Reports* (free subscription)*
- *Wisconsin Occupational Projections from 1984-85*, May 1986*
- *Wisconsin Industry Projects to 1990*, June 1982
- *The ABC's of Labor Market Information*, April 1983
- *Program Information for Employment, Training and Industry Development*, August 1985*
- *Program Planning Information for Wisconsin*, November 1985*
- *LMI: An Annotated Directory of Publications*, May 1984
- *Wisconsin Youth, Work and the Economy–What Now?*, October 1981
- *Women in the Labor Force*, October 1980
- *How Labor Markets Operate*, 1983
- *Wisconsin Commuting Patterns*, 1980
- *Wisconsin Economic Planning Information* (by service delivery area for JTPA)

North-Central Regional Planning Commission, Wausau, Wisconsin
- *Overall Economic Development Report*, 1986*

Iowa State Occupational Information Coordination Committee, Des Moines, Iowa
- *High Tech Occupations*, June 1985*
  - *A Guide for Local Occupational Program Planning*

Wisconsin Career Information System, University of Wisconsin Vocational Studies Center, Madison, Wisconsin
- *Using LMI for Career Decision Making*, 1986

Employment & Training Institute, Division of Urban Outreach, University of Wisconsin-Extension
- *(Name of County) LMI and Employer Directory*

US News & World Report, December 23, 1985
- "Jobs of the Future," pp. 40-45*
- "Challenges Future Bosses Will Face," p. 46
- "How Schools Train Kids for Tomorrow's Jobs," p. 47

National Center for Research in Vocational Education, Ohio State University*
- *Education and Training for a Technological World*, by C. Dale Lemons
- *Experiential Education Policy Guidelines*, by Richard Miguel

Garrett Press, Garrett Park, Maryland 20896
- *Emerging Careers: New Occupations for the Year 2000 and Beyond*, by S. Norman Feingold and Norma Reno Miller

University of Wisconsin-Stout, CVTAE, Menomonie, Wisconsin
- *Wisconsin Vocational Needs Assessment Manual*, October 1986

North-West Regional Education Laboratory, Portland, Oregon
- *Changing Channels: A Guide to Functional Literacy for the Automated Workplace*, by Nancy Conklin and Stephen Reder, November 1985
- *Literature Review on Improving Secondary Vocational Education Effectiveness*, by Thomas Owens, March 1986

Basic Books, Inc., New York
- *When Teenagers Work*, by Ellen Greenberger and Laurence Steinberg, 1986

** Statistical tables, projections, and trends are included in these sources, which CESA 9 relied on to formulate labor market reports to local districts.*

National Taskforce on Educational Technology, Washington, DC

Transforming American Education: Reducing the Risk to the Nation, A Report to the Secretary of Education, April 1986

Department of Public Instruction, Madison, Wisconsin

Education: Key to Economic Vitality and Individual Fulfillment (briefing book prepared for the Chief State School Officers Council). Includes six titles:

Education and the Economy: Policy and Recommendations

Study Commission Survey on Education and the Economy

"The Learning Enterprise," by Tony P. Carnevale. Reprint from *Training and Development Journal*

State Approaches to Targeting Education for Economic Growth: What Works? What Doesn't? by Peggy M. Siegel

The Growing Problem of Youth Unemployment, by Russell Rumberger

Educational Requirements for New Technologies: Visions, Possibilities, and Current Realities by Henry Levin and Russell Rumberger

CESA 9, Tomahawk, Wisconsin

Use Your Education for Employment, 1986 (pamphlet)

Institute for Cultural Affairs, Chicago, Illinois

Professional Conference Facilitators

Future Plans

1. Continue meeting with council.
2. Do graduate surveys and telephone follow-ups.
3. Continue development of labor market list of resources.
4. Coordinate status reports from school districts.
5. Develop informational items for students.
6. Continue curriculum development and articulation, particularly in
   - school-business partnerships,
   - school-supervised work experience,
   - vocational education, and
   - employability skills and attitudes.

The South Milwaukee Project

Don Stoddard, Director, (414) 768-6329

Contractual Conditions

The following conditions were identified for the project in the letter of approval from the State Superintendent:

1. Detail the Education for Employment Council composition. It should include at least half business and industry representatives of a cross section of the district or regional labor market. The remainder should represent teachers, administrators, counselors, board members, pupils, parents, organized labor, representatives of job training partnership councils, and representatives of district vocational and technical institutes or colleges.
2. Hold a training/planning workshop for the Education for Employment Council.
3. Meet with the Education for Employment Council at least four times during this funding cycle.
4. Include the Education for Employment Council as part of the ongoing evaluation of project progress.
5. Explain how work experience will be implemented in grades K-12.
6. Explain how business and education partnerships will be implemented in grades K-12.
7. Include as part of the employability skills and assessment survey a survey of economics and knowledge of business operations.
8. Explain how all the seven elements will be studied as part of the grades 7-8 curriculum development plan.
9. Explain the ongoing project evaluation process.
10. Provide an education for employment progress report to the Department of Public Instruction by November 15, 1986.

Project Activities

The South Milwaukee pilot is the only single district project.

Labor Market Information

The School District of South Milwaukee is coterminous with the borders of the City of South Milwaukee. This encompasses a land area of 4.82 square miles with a population of 20,512 citizens. The average annual family income is $25,140. The total equalized value of the city is $411,361,700.

The South Milwaukee industrial base is diversified with the heaviest concentration in metal businesses (21%) and machinery (21%). Textiles and apparel, lumber and wood, furniture and fixtures, chemicals, petroleum, rubber and plastics, and electrical equipment account for (11%) each. The food industry, material handling sales, and material handling distribution comprise the remaining base.

South Milwaukee's industrial growth was greatest between 1940-1980 with 13 firms (65%) established in that time period. One industry has been established in South Milwaukee since 1980. This follows the trend of many other communities across the state.

Manufacturing accounts for more than 2,500 full-time employees. Sixty-eight percent of the businesses employ 20 or fewer employees. This is important to note as recent studies indicate that the majority of growth and expansion will be in smaller firms. The wages of highly skilled employees average $9.43 per hour; semi-skilled workers average $7.90; and unskilled laborers made an average of $5.90. State averages are $10.11, $7.51, and $6.15; respectively.

Students tend to seek employment in Milwaukee, Ozaukee, Washington, and Waukesha counties. In general the area labor force increased in September, while unemployment increased and the unemployment rate remained unchanged. The larger gains in employment over the year have been 1,200 jobs in manufacturing, 4,600 jobs in the retail trade, 4,200 jobs in the service industry, and 1,200 jobs in finance, insurance, and real estate. It should be noted that 90% of the yearly gains were in the non-manufacturing sector. Overall, the labor force outlook for the metro area is encouraging.

Grade 7-8 Vocational Curriculum Plan

The primary thrust of the South Milwaukee project is the development of the role of vocational education in the middle school and implementation of the K-12 Wisconsin Developmental Guidance Program. The South Milwaukee Board of Education has made the decision to convert to a 9-12 high school and a 7-8 middle school. The curriculum revision to accommodate this change in structure will be coordinated with the introduction of education for employment.

At the high school level, plans are underway for the expansion of the current business/industry partnership program. Provision for a wider range of involvement with local businesses and agencies and K-8 participation is the goal. Also, at this time the vocational education program is undergoing an evaluation. The data from this along with labor market analysis will be used to assist students in identification of areas of career interest and in preparation for employment.

Education for Employment Council

The organization of an advisory committee of citizens, business and labor leaders, and educators for planning and organizational oversight is underway. Plans are in place for a day-long conference on January 28, 1987. Strategic plans for the implementation of project goals will be made at this time.

Developmental Guidance Plan

At the end of the first year, the first writing of the K-6 developmental guidance curriculum will have been tested and revisions made. Work will have begun on the developmental guidance curriculum for grades 7-8. Expansion of the business and school partnership program will be underway. The results of the vocational evaluation will be published and analysis made of the information generated. Adaptive use and modification of the instrument for education for employment purposes will be studied.

Vocational Evaluation

The DPI vocational evaluation scheduled for November 19, 20, 21 has been completed, including the self-evaluation phase. The on-site evaluation team has been assembled and made their visit, and the report will aid in the development of curriculum.

Advisory Committees

In the planning stage is the selection of the district Education for Employment Advisory Committee. An information and organizational seminar for the committee is planned for the month of January.

A curriculum steering committee has been formed to prepare for the anticipated curriculum revisions and their implementation. This group will identify what is already in place, what format will be used, and what resources are necessary for completion of this process. To assist the committee with this process a resource person from School Evaluation Services has been contacted. A January goal has been set for the accomplishment of the above.

Future Plans

1. Offer inservice session for the Education for Employment Advisory Committee.
2. Study implementation of the middle school concept for 7-8 grade as it pertains to education for employment.
3. Develop new home economics curriculum.
4. Develop new business education curriculum.
5. Expand partnership participation and work experience opportunities.
6. Develop guidance curriculum grades 7-8.
7. Continue to meet with the Education for Employment Council.
8. Determine knowledge of economics and business operations through a district survey.

CESA 4 and 10 Rural Education for Employment

Gari Spagnoletti, Director, (715) 597-3141

Contractual Conditions

Conditions contained in the project approval letter included:

1. Detail the Education for Employment Council composition. It should include at least half business and industry representatives of a cross section of the district or regional labor market. The remainder should represent teachers, administrators, counselors, board members, pupils, parents, organized labor, representatives of job training partnership councils, and representatives of district vocational and technical institutes or colleges.
2. Hold a training/planning workshop for the Education for Employment Council.
3. Meet with the Education for Employment Council at least four times during this funding cycle.
4. Include the Education for Employment Council as part of the ongoing evaluation of project progress.
5. Include various experiences and activities in addition to the proposed work simulations in the K-6 business and education partnership development, curriculum development for world-of-work examples in the basics, and employability curriculum development.
6. Develop a plan for an assessment of economics curriculum, development, and implementation.
7. Provide an education for employment progress report to the Department of Public Instruction by November 15, 1986.

Project Activities

Education for Employment Council

It is very clear that many Americans want schools to improve instruction and learning opportunities. Of particular interest is how concerns of the private sector complement those of educators at all levels. This became increasingly evident from a meeting with the 40-member Education for Employment Council for the purpose of discussing project objectives.

The main goal of the project is to develop a rural-based K-12 education for employment model, which can be shared with other districts. At this juncture, the core group of teachers, counselors and administrators has been identified, and workshops have been held on the orientation of objectives for the project and the seven elements addressing education for employment.

The core makeup of teaching staff representing participating schools are grades K-3, 4-6, 7-8, and 9-12. Each group has five members per school with three schools in each core group. The breakdown includes Alma Center, Taylor, and Augusta in K-3; Arcadia and Independence in 4-6; Eleva-Strum, Blair, and Fall Creek in 7-8; and Altoona, Whitehall, and Osseo-Fairchild in 9-12.

Movement Toward Goals

UW-Stout consultants have been assigned to the project to assist the staff and provide leadership in the achievement of project objectives. Additional workshop agenda items have been to identify with local industry common concerns regarding employability skills for specific jobs. One such visit was with Cray Research Technical Operations Division with the 7-12 Core Group at Chippewa Falls.

Staff members are given release days for workshops, and project funds are used to pay substitute salaries and workshop expenses such as consultant fees and bus travel to business and industry sites.

Additional project activities have included an employment survey of all 11th and 12th grade students in consortium schools; the instrument is designed to identify work experience, the students' attitude toward school and work, their career goals, and spending habits for their earned money.

Summaries are currently being processed for each school. These data will serve as benchmarks for meeting project goals and future evaluations.

The remaining workshops during the school year will be to develop working objectives for implementing the seven elements as identified by the Governor's Council. A two-week summer workshop will be held in June 1987 to develop the curriculum model for fall 1987 Core Group implementation and statewide dissemination.

The project is evaluated through a third-party evaluation procedure conducted by the center for Vocational, Technical and Adult Education, UW-Stout, Menomonie, Wisconsin. An interim report of the initial months of the project has been completed and is summarized here.

Future Plans

The rural consortium plans to continue to develop a transportable model of education for employment that can be used in other small, rural districts. Partnerships will be stressed, particularly as they relate to the use of modern technology. Materials will be designed and reproduced for use by schools to implement activities in all the seven areas.

Other plans include:

1. Meet with the Education for Employment Council.
2. Assess districts' economics curriculum.
3. Develop work simulations.
4. Develop world-of-work examples for school curriculum.
5. Stress employability skills development in the curriculum.

Summary

The five pilot projects are just beginning their operations, but all have begun on a successful path. The project directors have stressed the importance in identifying and selecting members for the Education for Employment Council. The interaction of business, industry, and school people on this council is a crucial first step in developing a plan.

The Jefferson County consortium has targeted all seven elements for their project. Work has begun on six of the seven, and the last will be addressed in the next cycle. The Janesville group has developed the diploma endorsement idea that will add extra meaning to a graduate's formal completion of school. South Milwaukee has completed its vocational education evaluation, designed a district Developmental Guidance Model, and will continue to emphasize the middle school

in its work. CESA 9 offers an extensive resource list to its districts and will serve as a model, along with CESAs 4 and 10, of how a regional agency can play a significant role in the implementation of education for employment.

Components of most plans have been outlined and projects are working toward implementation. Continued funding to insure continued success is important to bring these projects to their planned end.

Collecting and Using Labor Market Information

This appendix contains a variety of resources to help planners begin to collect and see how to use labor market information (LMI). The material presented here includes

- an essay exploring how one CESA uses LMI,
- examples of useful labor market statistics, showing their source, including
  - national labor projections,
  - Wisconsin state projections, and
  - Wisconsin county projections; and
- information on other labor market resources that can provide valuable information of this kind.

Using Labor Market Information in Developing an Education For Employment Plan

(Prepared by Steve Kain, Project Director, Cooperative Educational Service Agency 9, Education for Employment Project)

Local school districts have a variety of resources available to provide information useful to the development of their education for employment plan. Standard (m) requires that students have access to an appropriate curriculum based on labor market information, including follow-up studies of graduates, job placement, and employment needs. Districts unaccustomed to using these resources may be able to use a step-by-step approach.

- Conduct graduate follow-up surveys and compile results.
- Collect labor market information.
- Analyze information for significant findings.
- Make recommendations and include in the local plan.
- Implement the local plan.

Follow-up surveys of graduates have been used by districts with approved vocational education programs for many years. A sample survey responsive to education for employment initiatives is included in Appendix E. It surveys what graduates are doing currently and addresses curricular components of education for employment. Districts could modify this survey to meet local needs or use it verbatim. Large districts may choose to survey a sample of graduates while smaller districts may have to survey all graduates to get a significant number of responses. Graduates are usually surveyed periodically, with one- and/or five-year graduates surveyed most often.

Results from the CESA 9 education for employment demonstration project yielded a 51 percent return from two mailings to 2460 graduates of 12 high schools. Results were provided in both composite and district format for comparison purposes. Forms also allowed districts to compile written comments and suggestions from graduates with specific questions that required an open-ended response. CESA 9 experience indicates that the survey should be limited to one double-sided page to produce a maximum rate of response.

When a district feels they have sufficient input from their graduates, they must interpret the results. Survey responses in different areas may yield a variety of interpretations. For example, one district may wish a 90 percent positive response to a particular question while another district might view 40 percent as acceptable in providing access. Each district must determine the value it will assign to survey responses before making curricular changes or modifications based on survey data.

Districts need to gather labor market information including national, state, and local/regional statistics and trends. Caution should be exercised to assure that differences between employment by industry groups is not confused with employment by occupational groups. For example, the manufacturing industry may employ 25 percent of the labor force, but there are many occupations within manufacturing. Real confusion sets in if the service industry is not differentiated from service occupations.

Many articles in newspapers and magazines fail to make the distinctions necessary to allow the reader a clear picture of labor market trends projected for the future. They rely on percentages to grab the reader's interest. An occupation projected to grow by 70 percent over the near future may not be significant if only a few hundred people are employed nationwide. Another occupation may be projected to increase by a small percentage, but that may mean several hundred thousand jobs across the nation.

By analyzing student follow-up data and national, state, and local labor market information, local school leaders and community people serving on advisory committees or education for employment councils can begin to make recommendations. Recommendations may be for strengthening existing programs, modifying curriculums or policies to reflect changing student and community needs, or developing new programs to address areas in which the needs assessment indicates local students should have increased access.

Labor Market Statistics

The Education for Employment standard requires schools to analyze labor market information and local/regional economic needs. Once this information is gathered, student needs can be identified. This information will be used to formulate a plan to address the post-high school goals of students.

Much of the labor market information school districts need already is available. As districts collect and analyze their own data, educational planning can be based on current realities and future needs. Districts will then be able to direct their limited resources toward areas of program development likely to benefit the greatest number of students.

Following are examples of labor market statistics, gathered from various sources, which can help districts plan education for employment initiatives.

National Labor Projections

*Employment, Years 1986 and 2000 (Projected)**
(Numbers in Thousands)

Occupation	1986	Projected 2000 moderate alternatives	Change, 1986-2000 moderate alternative	
			Number change	Percent change
Total employment	111,623	133,030	21,407	19.2
Executive, administrative, and managerial workers	**10,583**	**13,616**	**3,033**	**28.7**
Education administrators	288	325	37	12.9
Financial managers	638	792	154	24.1
General managers and top executives	2,383	2,965	582	24.4
Marketing, advertising, and public relations managers	323	427	105	32.5
Accountants and auditors	945	1,322	376	39.8
Personnel, training, and labor relations specialists	230	278	49	21.2
Professional workers	**13,538**	**17,192**	**3,654**	**27.0**
Electrical and electronics engineers	401	592	192	47.8
Computer systems analysts	331	582	251	75.6
Lawyers	527	718	191	36.3
Teachers, preschool	176	240	64	36.3
Teachers, kindergarten and elementary	1,527	1,826	299	19.6
Teachers, secondary school	1,128	1,280	152	13.4
College and university faculty	754	722	−32	−4.2
Dentists	151	196	45	29.6
Physicians and surgeons	491	679	188	38.2
Registered nurses	1,406	2,018	612	43.6
Technicians and related support workers	**3,726**	**5,151**	**1,424**	**38.2**
Licensed practical nurses	631	869	238	37.7
Drafters	348	354	5	1.6
Computer programmers	479	813	335	69.9
Administrative support workers, including clerical	**19,851**	**22,109**	**2,258**	**11.4**
Switchboard operators	279	330	51	18.3
Computer operators, except peripheral equipment operator	263	387	124	47.2
Bookkeeping, accounting, and auditing clerks	2,116	2,208	92	4.3
Payroll and timekeeping clerks	204	180	−25	−12.0
General office clerks	2,361	2,824	462	19.6
Receptionists and information clerks	682	964	282	41.4
Secretaries	3,234	3,658	424	13.1
Typists and word processors	1,002	862	−140	−13.9

* Adapted from a June 25, 1987, press release from the U.S. Department of Labor, Bureau of Labor Statistics, 230 South Dearborn Street, Chicago, IL 60604.

Note: Data do not add to totals because only selected occupations are shown in each category.

Employment, Years 1986 and 2000 (Projected) (cont.)
(Numbers in Thousands)

Occupation	1986	Projected 2000 moderate alternative	Change, 1986-2000 moderate alternative	
			Number change	Percent change
Private household workers	**981**	**955**	**-26**	**-2.6**
Sales workers	**12,606**	**16,334**	**3,728**	**29.6**
Cashiers	2,165	2,740	575	26.5
Sales agents, real estate	313	451	138	43.9
Salespersons, retail	3,579	4,780	1,201	33.5
Service workers, except private household workers	**16,555**	**21,962**	**5,407**	**32.7**
Janitors and cleaners, including maids/housekeepers	2,676	3,280	604	22.6
Waiters and waitresses	1,702	2,454	752	44.2
Nursing aides, orderlies, and attendants	1,224	1,658	433	35.4
Hairdressers, hairstylists, and cosmetologists	562	662	99	17.7
Police patrol officers	349	409	61	17.4
Guards	794	1,177	383	48.3
Precision production, craft, and repair workers	**13,923**	**15,590**	**1,666**	**12.0**
Carpenters	1,010	1,192	182	18.1
Electricians	556	644	89	15.9
Painters and paperhangers, construction and maintenance	412	502	90	21.9
Plumbers, pipefitters, and steamfitters	402	471	69	17.2
Aircraft mechanics and engine specialists	107	129	22	20.1
Automotive mechanics	748	808	60	8.0
Machinists	378	373	-5	-1.5
Operators, fabricators, and laborers	**16,300**	**16,724**	**424**	**2.6**
Sewing machine operators, garment	633	541	-92	-14.5
Electrical and electronics assemblers	249	116	-134	-53.7
Welders and cutters	287	307	19	6.7
Bus drivers	478	555	77	16.2
Truck drivers	2,463	2,968	505	20.5
Industrial truck and tractor operators	426	283	-143	-33.6
Farming, forestry, and fishing workers	**3,556**	**3,393**	**-163**	**-4.6**
Gardeners and groundskeepers, except farming	767	1,005	238	31.1
Farm workers	940	750	-190	-20.3
Farm operators and managers	1,336	1,051	-285	-21.3

CESA 9, a recipient of one of the Education for Employment Demonstration Grants, concentrated some of its efforts on developing labor market information. The following information comes from their booklet, "A Labor Market Informational Planning Guide in 'Education for Employment,' 1984-1985." CESA 9 serves districts in Vilas, Oneida, Lincoln, Langlade, Marathon, and Taylor counties.

Occupations with Largest Job Growth 1984-1995; National Projections

Occupation	New Jobs	Percent Increase
Cashiers	556,000	29.8%
Registered nurses	452,000	32.8
Janitors and cleaners	443,000	15.1
Truck drivers	428,000	17.2
Waitstaff and waitpersons	424,000	26.1
Wholesale trade salesworkers	369,000	29.6
Nursing aides, orderlies, and attendants	348,000	28.9
Retail salesworkers	343,000	12.6
Accountants and auditors	307,000	34.8
Teachers, kindergarten and elementary	281,000	20.3
Secretaries	268,000	9.6
Computer programmers	245,000	71.7
General office clerks	231,000	9.6
Food preparation workers, not fast food	219,000	22.1
Food preparation and service, fast food	215,000	17.9
Computer systems analysts, EDP	212,000	68.7
Electrical and electronic engineers	206,000	52.8
Electrical and electronic technicians	202,000	50.0
Guards	188,000	25.6
Auto and motorcycle mechanics	185,000	20.1
Lawyers	174,000	35.5
Cosmetologists and related	150,000	28.7
Cooks, restaurant	138,000	29.7
Maintenance repairers	137,000	15.6
Bookkeeping and accounting clerks	118,000	6.0
Bartenders	112,000	27.9
Computer operators	111,000	46.1
Physicians and surgeons	109,000	23.0
Licensed practical nurses	106,000	17.6
Carpenters	101,000	10.7
Switchboard operators	100,000	28.7
Food service and lodging managers	89,000	13.6
Electricians	88,000	16.2
Teacher aides and assistants	88,000	18.3
Blue-collar supervisors	85,000	5.8
Receptionists and information clerks	83,000	18.2
Mechanical engineers	81,000	34.0

Fastest Growing Occupations by Percentage, 1984-1995; National Projections

Occupation	New Jobs	Percent Increase
Paralegal personnel	51,000	97.5%
Computer programmers	245,000	71.7
Computer systems analysts, EDP	212,000	68.7
Medical assistants	79,000	62.0
Data processing equipment repairers	28,000	56.2
Electrical and electronic engineers	206,000	52.8
Electrical and electronic technicians	202,000	50.7
Computer operators, not peripheral equipment	111,000	46.1
Peripheral EDP equipment operators	32,000	45.0
Travel agents	32,000	43.9
Physical therapists	25,000	42.2
Physician assistants	10,000	40.3
Securities and financial service sales	32,000	39.1
Mechanical engineering technicians	20,000	36.6
Lawyers	174,000	35.5
Corrections officers and jailers	45,000	34.9
Accountants and auditors	307,000	34.8
Mechanical engineers	81,000	34.0
Registered nurses	452,000	32.8
Employment interviewers	23,000	31.7

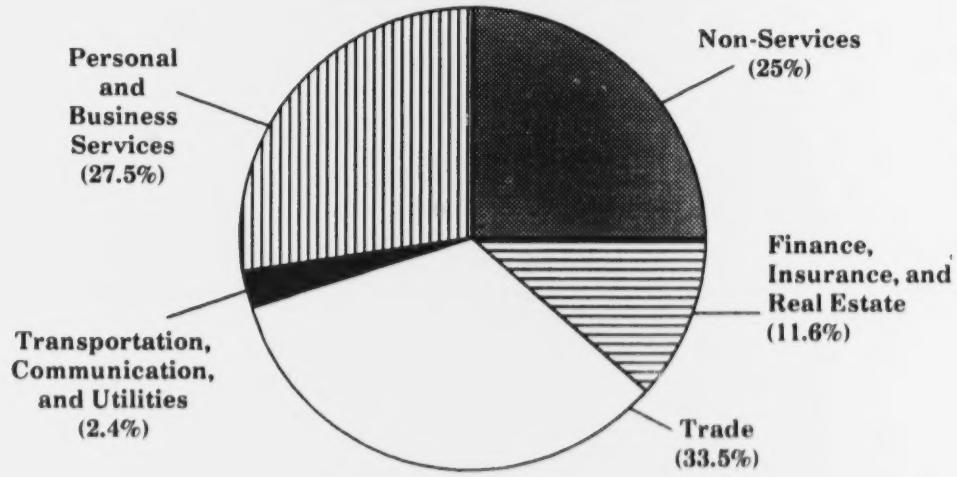
Fastest Declining Occupations by Percentage, 1984-1995; National Projections

Occupation	Lost Jobs	Percent Decrease
Stenographers	96,000	40.3%
Shoe sewing machine operators	11,000	31.5
Railroad brake and signal operators	13,000	26.4
Rail car repairers	6,000	22.3
Furnace and kiln operators	13,000	20.9
Shoe and leather workers and repairers	8,000	18.6
Private household workers	182,000	18.3
Telephone station installers and repairers	19,000	17.4
Garment sewing machine operators	113,000	16.7
Textile machine operators	44,000	15.7
Textile machinery maintenance mechanics	4,000	14.8
Statistical clerks	12,000	12.7
Industrial truck and tractor operators	47,000	11.9
Central office operators	9,000	11.5
Farm workers	121,000	11.2
College and university faculty	77,000	10.6
Farm and home management advisors	3,000	9.6
Extruding machine operators	3,000	9.1
Garment pressing machine operators	10,000	8.8
Postal service clerks	27,000	8.5

Wisconsin State Projections

Following is information regarding labor market information for the State of Wisconsin prepared by the Wisconsin Department of Development, Division of Policy Development, Bureau of Research, and the Wisconsin Department of Industry, Labor, and Human Relations, Division of Employment and Training Policy, Bureau of Labor Market Information.

*Distribution of Projected New Jobs in Wisconsin 1984-1995**


Personal and Business Services (27.5%)
Non-Services (25%)
Finance, Insurance, and Real Estate (11.6%)
Transportation, Communication, and Utilities (2.4%)
Trade (33.5%)

*Adapted from *The Economic Development Potential of the Service Industries in Wisconsin* (Madison, WI: Department of Development, July 1986) p. 19.

*Past and Projected Employment Performance of Major Wisconsin Sectors**

	1984 Wisconsin Employment	Compounded Annual Employment Growth Rates	
		1979-84 Actual	1984-95 Forecast
Agriculture, forestry, fishing	15,322	5.19%	−0.14%
Construction	63,088	−4.78	1.21
Finance, insurance, and real estate	99,417	1.95	2.10
Government	285,289	0.14	1.29
Personal and business services	368,999	2.64	1.39
Manufacturing	518,632	−2.58	0.79
Mining	1,870	−6.66	−2.85
Trade	453,723	0.53	1.38
Transportation, communication, and utilities	85,074	0.91	0.56
Total	1,891,424	−0.16	1.20

* Adapted from *The Economic Development Potential of the Service Industries in Wisconsin* (Madison, WI: Department of Development, July 1986) p. 20.

*Projected Yearly Job Openings In Wisconsin, 1985 Through 1995**

Rank	Occupation Title	Total Annual Job Openings
1	Salespersons, retail	4,067
2	Janitors and cleaners (excluding maids)	3,729
3	General managers and top executives	2,960
4	General office clerks	2,007
5	Cashiers	1,954
6	Bookkeeping and accounting clerks	1,858
7	Bartenders	1,824
8	Nursing aides and orderlies	1,805
9	Registered nurses	1,629
10	Waiters and waitresses	1,339
11	Stock clerks, sales floor	1,227
12	Food preparation workers	1,201
13	Sales reps. exc. scientif. and retail	1,182
14	Maids and housekeeping cleaners	1,078
15	Maintenance repairers, general utility	1,004
16	Teachers, elementary	945
17	Truck drivers, heavy	928
18	Guards and watch guards	873
19	Accountants and auditors	784
20	Teachers, secondary school	783
21	Gardeners and groundskeepers	701
22	Cooks, restaurant	684
23	Truck drivers, light	674
24	First line supervisors, production	667
25	First line supervisors, clerical	617
26	Hand packers and packagers	617
27	First line supervisors, sales	588
28	Carpenters	576
29	Combined food preparation, service	556
30	Financial managers	544
31	Cooks, speciality fast food	528
32	Bus drivers, school	525
33	Physicians and surgeons	514
34	Directors, religious activities/education	503
35	Hairdressers and cosmetologists	500

(**Note:** Rapidly growing occupational categories in the state do not necessarily generate large numbers of new jobs. In only 11 of the 35 occupations is total employment expected to grow by more than 500 jobs between 1985 and 1995.)

*Adapted from *Industrial and Occupational Projections to 1995* (Madison, WI: Department of Industry, Labor and Human Relations, September 1987) p. 64.

Projected Percentage Increase In Employment
*In Wisconsin, 1985 Through 1995**

Rank	Occupation Title	Percent increase In Jobs
1	Paralegal personnel	48%
2	Actuaries	43
3	Electrical and electronic engineer	35
4	Medical assistants	35
5	Computer systems analysts, EDP	34
0	Petroleum technicians and technologists	33
6	Registered nurses	31
7	Data entry keyers, composing	30
8	Electrical and electronic technicians.	30
9	Data processing equipment repairers	30
10	Medical records technicians and technologists	29
11	Electrocardiograph technicians	29
12	Electroencephalograph technicians	27
13	Veterinarians, veterinary inspectors	27
14	Ushers, lobby attendant, ticket taker	26
15	Occupational therapists	26
16	Artists and commercial artists	26
17	Physical therapists	26
18	Surgical technicians	26
19	Cashiers	26
20	Directors, relig. act./educ.	25
21	Public relations specialists	25
22	Respiratory therapists	25
23	Medical scientists	25
0	Petroleum refinery operators	25
0	Roustabouts	25
24	Combination machine tool set/OP, M/P	25
25	Correction officers and jailers	24
26	Accountants and auditors	24
27	Lawyers	24
28	Optometrists	23
29	Dental laboratory technicians	23
30	Combination machine tool operator, M/P	23
31	Numberical control machine tool, M/P	23
32	Animal caretakers, except farm	22
33	Mechanical engineers	22
34	Credit checkers	22
35	Advertising clerks	22

*Adapted from *Industrial and Occupational Projections to 1995* (Madison, WI: Department of Industry, Labor and Human Relations, September 1987) p. 65.

Projected Decline In New Employment
*In Wisconsin, 1985 Through 1995**

Rank	Occupation Title	Annual Job Growth
1	Industrial truck and tractor operator	-123%
2	Stenographers	-105
3	Data entry keyers, except composing	-103
4	Sewing machine operator, garmet	-35
5	Payroll and timekeeping clerks	-28
6	File clerks	-25
7	Electrical powerline instal/repairer	-22
8	Stock clerks: stockroom or warehouse	-20
9	Machine tool cutting operator, M/P	-20
10	Machine forming operators, M/P	-19
11	Shoe sewing machine operator	-17
12	Cannery workers	-16
13	Textile machine operators	-12
14	Grinding, buffing machine set/top. M/P	-12
15	Punching machine setter/operator, M/P	-10
16	Graduate assistants, teaching	-9
17	Furnace, kiln, oven, kettle operator	-8
18	Sewing machine operator, nongarmet	-7
19	Telephone station installer and repairer	-7
20	Statistical clerks	-7
21	Press, brake machine setter/operator, M/P	-6
22	Order fillers, sales	-6
23	Lathe, turning machine setter/operator, M/P	-5
24	Drilling, boring machine setter/operator, M/P	-4
25	Painters, transportation equipment	-4
26	Shoe and leather workers	-4
27	Cutting and slicing setter/operator	-3
28	Portable machine cutters	-3
29	Machinery mechanics: textile machine	-3
30	Slaughterers and butchers	-2
31	Law clerks	-2
32	Pest controllers and assistants	-2
33	Duplicating machine operators	-2
34	Sewers, hand	-2
35	Rolling machine setter/operator, M/P	-2
36	Extruding machine setter/operator, M/P	-2
37	Tax examiner, collector, revenue agent	-2
38	Milling, planing machine setter/operator, M/P	-2
39	Textile machine setter/operator	-2
40	Directory assistance operators	-2
41	Patternmakers and layout workers	-2
42	Shear, slitter machine setter/operator, M/P	-1
43	Claims takers, unemploy. benefits	-1
44	Machinery mechanics: sewing machine	-1
45	Central office operators	-1

*Adapted from *Industrial and Occupational Projections to 1995* (Madison, WI: Department of Industry, Labor and Human Relations, September 1987) p. 67.

Wisconsin County Projections

CESA 6, which serves school districts in Dodge, Fond du Lac, Green Lake, Outagamie, Washington, Waupaca, and Winnebago counties, received labor market information from the Employment and Training Institute, Division of Outreach and Continuing Education at the University of Wisconsin-Milwaukee. The following information is from a draft of a Fond du Lac County planning guide for educators, prepared by the Institute. Similar information is available at each CESA office for every Wisconsin County.

- Education Changes in Fond du Lac County
  - The baby boom in Fond du Lac County resulted in dramatic changes in school enrollment. Grades 1-12 went from 11,520 in 1950 to 23,322 in 1970 and to 19,918 in 1980.
  - More people were staying, finishing high school, and then going on to postsecondary schools in the county. By 1990, more Fond du Lac County residents will be attending colleges and technical schools than high schools.
  - In 1950, 66 percent of Fond du Lac County residents hadn't finished high school. By 1980, that figure dropped to less than 32 percent.
  - Education inflation has hit Fond du Lac County. By 1990, the majority of the county's labor force will have at least some postsecondary education. The baby boom has produced more and better-schooled workers.
  - A college or technical school degree has replaced the high school diploma as the minimum credential for future employment in better-paying occupations.

- Social Changes in Fond du Lac County
  - Women will continue to make up much of the growth in the labor force through the year 2000. From 1960 to 1980, the percentage of women in the Fond du Lac County work force jumped from 38 percent to 62 percent. During the same time, labor force participation of mothers with preschool children jumped from 19 percent to 50 percent.
  - Fertility rates in Fond du Lac County have dropped 43 percent from 1960 to today.
  - Divorces jumped from 124 in 1970 to 278 today, resulting in a dramatic increase in single-parent families.
  - In 1980, one out of 13 women was a single parent. If they were raising young children alone, one out of two faced being on welfare or living in poverty.
  - In Fond du Lac County, as elsewhere, most women should expect to be working throughout their lives, even while they are raising their children.
  - The two-income family has put increased demands on women as homemakers and workers. Tension between men and women and their roles in families will be the social challenge of the next 25 years.

- The Fond du Lac County Labor Force
  - The Fond du Lac County labor force grew rapidly during the 1970s. Nearly 74 percent of the increased labor force was women.
  - Manufacturing jobs make up 35 percent of all County jobs, down from 1978 levels but above state levels. The average weekly wage in Fond du Lac County was below the state average in 1983 and in 1986.
  - Jobs for women remained clustered in clerical and administrative support, service, and sales occupations. These lower paying occupational areas accounted for 71 percent of all new jobs for women during the 1970s.
  - Women will continue to be paid one-half as much as men in the same job and with the same education.
  - The number of women who work outside the home is expected to continue to increase.
  - The average age of a Fond du Lac County worker will be older as the baby boom takes over a larger share of the work force.

- School and Work—State and National Trends
  - Competition will be fierce for the better jobs which match education levels of postsecondary school graduates. More education will no longer mean a better job.
  - Education inflation (when almost everyone has a diploma) already has forced students into postsecondary schools to compete for the best jobs.

- High school students will need to plan their careers carefully as postsecondary education will be a risky investment. By 1990, at least one out of five college graduates will not be in college-level jobs.
- By 1990, as much as one-half of the potential workforce will have some postsecondary education.
- Education at the postsecondary level will continue to pay off better for men than women. Women with advanced degrees average less income than male high school dropouts.
- Training high school dropouts and low achievers in basic employability skills will be the challenge of the 1990s.
- Wisconsin's most educated work force will continue to leave the state. Between 1975 and 1980, 24,000 college graduates left Wisconsin, mostly to southern and western states.
- The cost to society of people not having basic skills and employability skills will mount in the form of increased welfare costs, lost or lower productivity, and lower labor force participation rates.

- Megatrends
  - For the first time in the last 40 years, the standard of living of high school graduates may not match that of their parents.
  - Education credentials will become increasingly important, but will be less of a factor for economic success. A degree plus marketable skills will be the measure.
  - Higher rates of divorce will mean more single parent families; more men and women will be on their own—and should plan for it.
  - Adolescence will be prolonged as students spend more time in postsecondary education and at home before finding their first job.
  - Education inflation will increase, forcing larger numbers of postsecondary graduates to relocate to find a job to match their skills.
  - The difference between male and female wages will increase slightly.
  - The coming labor shortage of 18- to 24-year-olds will force employers to be more dependent on the population of semiliterate and unskilled to fill entry-level jobs.
  - The American dream of a new house, a new car, and the wife at home with the kids is a thing of the past for most new families.
  - Increasing divorce rates will result in more single parent families receiving welfare.
  - Training, retraining and re-retraining will be necessary for employers and employees to keep pace with technological changes in the market place.

Labor Market Resources

- The Bureau of Labor Market Information is the principal data-gathering agency of Wisconsin state government in the broad field of labor economics. Occupational, demographic, income, employment and unemployment, and other information about Wisconsin's economy and labor market conditions form the state's labor market information base. Wisconsin's Bureau of Labor Market Information is in the Division of Employment and Training Policy in the Department of Industry, Labor and Human Relations (DILHR), P.O. Box 7944, Madison, WI 53707. More information about the state's labor market information program can be obtained by contacting the Employment and Training Library, DILHR, (608) 266-2832.

  The following resources and order form for labor market information publications were taken from *Labor Market Information*, an annotated directory of publications, May 1987, 9th edition. This publication also contains more comprehensive descriptions of the labor market publications available. For a copy of this directory call the Wisconsin Department of Industry, Labor and Human Relations at (608) 266-7034 or (608) 266-2832.

  Following is an order form for Labor Market Information publications from the Wisconsin Department of Industry, Labor and Human Relations. (**Note:** OP means out-of-print.)

Order Form **Labor Market Information (LMI) Publications**

Number of Copies

___ ABC's of LMI: An Introduction to Labor Market Concepts
___ Civilian Labor Force Estimates, State and County Data (Indicate years: 1975 to date)
___ How Labor Markets Operate (1983)
___ Labor Market Information: An Analysis (1984)
___ Labor Market Information: An Annotated Directory of Publications, March 1987
___ Labor Market Information: Data Series Definitions (1983)
___ LMI Glossary: Terms Used in Labor Market Analysis (rev. 1983)
___ Occupational Employment Estimates for Selected Nonmanufacturing Industries, 1981
___ Planning Information for Employment, Training, and Industrial Development (1985)

___ Wisconsin (state)	___ North Central	___ South Central Wisconsin
OP Central Wisconsin	___ North Lake Winnebago	OP Southwestern Wisconsin
___ Lake Michigan	___ Northeastern Wisconsin	___ Wau-Ozau-Washington
OP Madison/Dane	___ Northwest Wisconsin	___ West Central Wisconsin
___ Marathon	OP Rock County	___ Western Wisconsin
OP Milwaukee	___ Southeastern Wisconsin	___ Winne-Fond Lake

___ Program Planning Information for Wisconsin, 1986-88
___ Wisconsin Commuting Patterns, 1980 (1984)
___ Wisconsin Occupational Projections from 1984 through 1995
___ Wisconsin Youth, Work, and the Economy—What Now? (1981)
___ Wage Survey, 1986

___ Wisconsin (state)	___ North Central	___ South Central Wisconsin
___ Central Wisconsin	___ North Lake Winnebago	___ Southwestern Wisconsin
___ Lake Michigan	___ Northeastern Wisconsin	___ Wauk-Ozau-Washington
___ Madison/Dane	___ Northwest Wisconsin	___ West Central Wisconsin
___ Marathon	___ Rock County	___ Western Wisconsin
___ Milwaukee	___ Southeastern Wisconsin	___ Winne-Fond Lake

___ Appleton Oshkosh MSA	___ La Crosse MSA
___ Brown MSA	___ Milwaukee MSA
___ Eau Claire MSA	___ Racine MSA
___ Green Bay MSA	___ Sheboygan MSA
___ Kenosha MSA	

___ Wisconsin Wage Surveys, Catalog of Definitions

Sample Copy	Mailing List	
___	___	Affirmative Action Program Data (Annual)
___	___	Consumer Price Index (Monthly)
___	___	Employment and Wages Covered by Wisconsin's U.C. Law (Quarterly)
___	___	Employment, Wages, and Taxes Due Covered by Wisconsin's U.C. Law: Tables 209, 210, 211 (Annual)
___	___	Inform (Bi-Monthly)
___	___	Wisconsin Covered Employment by size of Reporting Unit and by Industry and County: Table 221 and 222 (Annual)
___	___	Wisconsin Economic Indicators (Monthly)
___	___	Wisconsin Employment Picture (Monthly)

Mailing Address:
Name _____
Street or P.O. Box _____
City, State, Zip Code _____

Send this form to: Employment and Training Library
Wisconsin Department of Industry, Labor and Human Relations
P.O. Box 7944
Madison, Wisconsin 53707

- Following is a listing of the service delivery areas in Wisconsin and contact people:

Service Delivery Areas	Counties	Contact Person	Telephone No.
1. Statewide			
Wisconsin Data		Hartley J. Jackson	(608) 266-5843
Economic Information		August Cibarich	(608) 266-0522
Wages, Projections, Indicators, OES		Gerald Snow	(608) 266-0230
Bureau of Labor Statistics Data		Diane Griffin	(608) 266-2930
Wisconsin Occupational Information Coordinating Committee		Janet Washbon	(608) 266-6722
Employment and Training Library		Janet Pugh	(608) 266-2832
2. Winne-Fond Lake (Fond du Lac)	Fond du Lac, Green Lake, Winnebago	Carol Carpenter	(414) 929-3943
3. Southeastern (Racine)	Kenosha, Racine, Walworth	Marge Smith	(414) 636-3640
4. Northern Lake Winnebago (Menasha)	Calumet, Outagamie, Waupaca	Dan Curtin	(414) 738-5292
5. South Central (Watertown)	Columbia, Dodge, Jefferson, Sauk	Bev Farnsworth	(414) 261-4963
6. Marathon County (Wausau)	Marathon	Gary Werner	(715) 842-0840
7. Rock County (Janesville)	Rock	Claude Miller	(608) 755-2091
8. Dane County (Madison)	Dane	Patty Sonntag	(608) 266-3391
9. Northwest (Hayward)	Ashland, Bayfield, Burnett, Douglas, Iron, Price, Rusk, Sawyer, Taylor, Washburn	Bev Gehrke	(715) 634-4845
10. Central (Wisconsin Rapids)	Adams, Marquette, Portage, Waushara, Wood	Norm Hatch	(715) 421-2000 Ext. 224
11. West Central (Eau Claire)	Barron, Chippewa, Clark, Dunn, Eau Claire, Pepin, Pierce, Polk, St. Croix	Paul Tabor	(715) 836-2998
12. W-O-W (Waukesha)	Ozaukee, Washington, Waukesha	Glenn Peterson	(414) 521-5048
13. North Central (Rhinelander)	Forest, Langlade, Lincoln, Oneida, Vilas	Clare Dunn	(715) 369-4757
14. Northeastern (Green Bay)	Brown, Florence, Marinette, Menominee, Oconto, Shawano	Jim Lemke	(414) 436-4069
15. Southwestern (Lancaster)	Grant, Green, Iowa, LaFayette, Richland	Lola Sweeney	(608) 723-2153
16. Western (La Crosse)	Buffalo, Crawford, Jackson, Juneau, La Crosse, Monroe, Trempealeau, Vernon	Paul Schwartz	(608) 785-9307
17. Lake Michigan (Sheboygan)	Door, Kewaunee, Manitowoc, Sheboygan	Dick Seidemann	(414) 459-3846
18. Milwaukee County (Milwaukee)	Milwaukee	Ron Ramlow	(414) 227-4310

- Following are additional labor market information resources that may be beneficial in implementing an education for employment program.
  - Monthly Labor Review, November 1985
    U.S. Bureau of Labor Statistics
    Region V, Ninth Floor
    Federal Office Building
    230 South Dearborn Street
    Chicago, Il 60604
    ($4; make checks payable to the Superintendent of Documents)
  - Local regional or city planning commissions
  - Local chambers of commerce
  - Local vocational, technical, and adult education centers
  - Local university campuses
  - Department of Industry, Labor and Human Relations
    Division of Employment and Training Policy
    P.O. Box 7972
    Madison, WI 53707
    (608) 266-5370

Appendix E

Sample Student Follow-Up Survey Form*

Name _____ ☐ Female ☐ Male

1. **As of September 15, I will be:** *(Check only one.)*
   - ☐ 1. in the military service.
   - ☐ 2. employed full-time, not in school.
   - ☐ 3. employed part-time, not in school.
   - ☐ 4. operating my own business full-time.
   - ☐ 5. full-time student.
   - ☐ 6. part-time student.
   - ☐ 7. not working, but looking for employment.
   - ☐ 8. not looking for employment.

2. **During school, did you learn about:** *(Check all that apply.)*
   - ☐ 1. new and emerging occupations?
   - ☐ 2. jobs which will soon be obsolete?
   - ☐ 3. male-dominated jobs which females may now enter?
   - ☐ 4. female-dominated jobs which males may now enter?
   - ☐ 5. occupations which have many job opportunities?
   - ☐ 6. occupations which are overcrowded with workers?
   - ☐ 7. jobs which are related to your interest areas?
   - ☐ 8. job salaries in your interest areas?
   - ☐ 9. educational requirements for jobs?

3. **What employability attitudes and skills did you learn?** *(Check all that apply.)*
   - ☐ 1. How to work with others.
   - ☐ 2. How to accept advice and supervision.
   - ☐ 3. How to supervise others.
   - ☐ 4. The value and importance of work.
   - ☐ 5. The importance of being on time.
   - ☐ 6. The importance of going to work every day.
   - ☐ 7. The importance of a clean and appropriate appearance.
   - ☐ 8. The importance of doing your best, even on unpleasant tasks.
   - ☐ 9. The importance of meeting deadlines.

4. **In school, did you learn about:** *(Check all that apply.)*
   - ☐ 1. using a variety of resources to look for job openings?
   - ☐ 2. writing your own resumé?
   - ☐ 3. completing job applications?
   - ☐ 4. how to present yourself in an interview?

5. **During high school, I had:** *(Check all that apply.)*
   - ☐ 1. volunteer job experience (in-school or out-of-school).
   - ☐ 2. a paid part-time job during the school year.
   - ☐ 3. a job as part of my vocational education program.
   - ☐ 4. odd jobs, but no regular or part-time jobs.
   - ☐ 5. jobs during most summers.
   - ☐ 6. jobs with student clubs or organizations.
   - ☐ 7. jobs as community service.

6. **In school, did you learn:** *(Check all that apply.)*
   - ☐ 1. how to operate a business of your own?
   - ☐ 2. how a business makes a profit?
   - ☐ 3. about the American free enterprise system?
   - ☐ 4. about foreign economic systems?
   - ☐ 5. how supply-and-demand works?
   - ☐ 6. how we trade with other countries?
   - ☐ 7. how to compare prices when shopping?

7. **I had field trips for career exploration during:**
   - ☐ 1. elementary school.

*Developed by CESA 9 Education for Employment Pilot Project, 328 North Fourth Street, Tomahawk, WI 54487.

☐ 2. middle school.
☐ 3. high school.

8. **I talked with a counselor about careers during:**
☐ 1. elementary school.
☐ 2. middle school.
☐ 3. high school.

9. **Did teachers explain careers related to their courses?**
☐ 1. nearly all did
☐ 2. most did
☐ 3. few did
☐ 4. none did

10. **Do you feel you will need more education to reach your career goals?**
☐ Yes
☐ No

In school, did you learn to: *(Check all that apply.)*

11. ☐ listen to and follow instructions?
12. ☐ give instructions others can follow?
13. ☐ make a speech to a small group?
14. ☐ look for the main idea when reading something?
15. ☐ construct and understand charts and graphs?
16. ☐ write a clear paragraph others can understand?
17. ☐ take notes while listening to a speaker?
18. ☐ use fractions and decimals?
19. ☐ understand and use percentages?
20. ☐ make change using money?
21. ☐ fill out and file your own income taxes?
22. ☐ measure or weigh things using the proper device?
23. ☐ use a hand-held calculator?
24. ☐ load a computer program and follow the screen directions?

What vocational skills did you learn in high school?

25. ☐ typing
26. ☐ word processing on a computer
27. ☐ 10-key calculator
28. ☐ computerized accounting
29. ☐ commercial food service
30. ☐ family management
31. ☐ retail textiles
32. ☐ child/elderly care
33. ☐ crop/livestock production
34. ☐ agribusiness
35. ☐ farm equipment usage
36. ☐ forestry/fish/game management
37. ☐ retail business management
38. ☐ sales skills
39. ☐ advertising
40. ☐ manufacturing processes
41. ☐ computer-aided design
42. ☐ power and transportation
43. ☐ graphic communications
44. ☐ blueprint reading
45. ☐ electronics
46. ☐ construction

What person gave you the most help in deciding on a career?

47. ☐ parent
48. ☐ teacher
49. ☐ counselor
50. ☐ relative
51. ☐ friend
52. ☐ other: _____

What courses do you wish you had been able to take more of during high school?

_____

_____

_____

Comments:

Appendix F

School/Business Partnership Resources

The following list of resources has been compiled and adapted from several sources. These sources include

- *The American School Board Journal* (April 1987);
- ERIC, Clearinghouse on Education Management, College of Education, University of Oregon;
- *Dynamic Connections for Learning: The Future of School/Business Partnerships*, published by the School of Education, Massachusetts Institute for Social and Economic Research, University of Massachusetts;
- *Partnerships for Education Handbook*, published by the Michigan Department of Education; and
- a status report on school/business partnerships, published by the Phi Delta Kappa Education Foundation.

Publications

Britt, Linda A., ed. *Exemplary Practice Series: School Business Partnerships.* Phi Delta Kappa Center for Evaluation, Development, and Research, 1985.

Business and Education: Partners for Excellence, 1984. Available from Massachusetts Department of Education, Bureau of Student, Community and Adult Services, Community Education Office, 1385 Hancock Street, Quincy, MA 02169; (617) 770-7581.

This publication contains proceedings of five regional conferences, cosponsored by the Massachusetts Department of Education, Associated Industries of Massachusetts, Massachusetts Association of Superintendents, and the Massachusetts Business Roundtable. It includes strategies and ideas for developing successful partnerships.

Business-Education Partnerships. Available from Manager of Community Relations Resources, The Dow Chemical Company, 2020 Dow Center, Midland, MI 48674; (517) 636-1682.

This is a how-to-do-it manual for businesses.

Business and Industry . . . Partners in Education. Available from American Association of School Administrators, 1801 North Moore Street, Arlington, VA 22209.

This book lists more than 25 kinds of partnership activities.

Company-School Collaboration–A Manual for Developing Successful Projects. Available from American Council of Life Insurance, 1850 K Street, NW, Washington, DC 20006; (202) 862-4000.

Connections: The Campus and the Commonwealth's Economy. The Chancellor's Report, University of Massachusetts at Amherst, 1985.

Six innovative outreach programs, illustrating university activities that affect the state's economic growth and competitiveness are presented in detail, with additional examples mentioned in brief.

Creating and Managing a Corporate School Volunteer Program–A Manual for Program Directors. Available from National School Volunteer Program, 701 North Fairfax Street, Suite 320, Alexandria, VA 22314; (703) 836-4880.

Creating School-Business Partnerships, 1983. Available from Massachusetts Department of Education, Bureau of Student, Community and Adult Services, Community Education Office, 1385 Hancock Street, Quincy, MA 02169; (617) 770-7581.

Six case studies as well as brief profiles of a range of existing Massachusetts partnerships are presented by city and town. Recommendations and resource lists are included.

Danzberger, Jacqueline P., and Michael D. Usdon. "Building Partnerships: The Atlanta Experience." *Phi Delta Kappan* 65.6 (February 1984), pp. 393-96.

Data Bank Report: Getting Involved. Available from Future Business Leaders of America, P.O. Box 17417—Dulles, Washington, DC 20041; (703) 860-3334.

This publication discusses how high schools, colleges, and businesses are working together to educate tomorrow's business leaders.

A Decade of Commitment: School-College Collaboration in Boston: 1975-1985, 1985. Copies available from Office of the President, Boston University, 147 Bay State Road, Boston, MA 02215.

This provides glimpses of the wide range of activities promoted by school/college collaborations begun with court-ordered desegregation.

Discover Total Resources, 1985. Available from Mellon Bank, Community Affairs Division, One Mellon Bank Center, Pittsburgh, PA 15258.

Originally developed to assist nonprofit organizations, this free book is a guide to tapping the full range of community resources: money, people, goods, and services.

The Doable Dozen. Available from National Community Education Association, 119 North Payne Street, Alexandria, VA 22314.

This is a resource full of real-life tested methods for developing school-business partnerships.

Doll, Russell C. "Speculations on the Meaning of the Trend Toward Corporate Education." *Phi Delta Kappan* 61.5 (January 1980), pp. 333-37.

Doyle, Dennis P., and Marsha Levine. "Business and the Public Schools: Observations on the Policy Statement of the Committee for Economic Development." *Phi Delta Kappan* 67.2 (October 1985), pp. 113-18.

Education Is Everybody's Business: Partnerships for the Future. Available from Partnerships for Education Task Force, Michigan Department of Education, P.O. Box 30008, Lansing, MI 48909; (517) 373-1806.

William C. Hollister, executive vice president and general manager of Universal Steel Company of Michigan, gives his views about business involvement with education.

Enterprise. Available from National Association of Manufacturing, 1776 F Street, NW, Washington, DC 20006; (202) 626-3732.

Eurich, N.P. *Corporate Classrooms: The Learning Business.* Princeton, NJ: Carnegies Foundation for the Advancement of Teaching, 1985.

In the Foreword, Ernest L. Boyer indicates that the upwards of $40 billion spent by business on in-house education warrants designation of this important force as the "third sector" of American education. This publication includes a discussion of public policy issues.

Harbaugh, Mary. "Schools Are Bullish on Business." *Instructor* 94.9 (May 1985), pp. 24-27. EJ319210. Available from University Microfilms International, Article Copy Department, 300 North Zeeb Road, Ann Arbor, MI 48106; (800) 521-3042.

How to Form Business-School Partnerships. Available from Education Commission of the States, 1860 Lincoln Street, Suite 300, Denver, CO 80295; (303) 830-3620.

Hoyt, Kenneth B. "A Career Education Perspective on Business-Education Partnerships" *Community Education Journal* 8.4 (July 1986), pp. 13-15.

This guide presents a case for increasing school/business partnerships in career education because of the changing nature of work.

Industry and University: New Forms of Cooperation and Communication, 1984. Available from Organization for Economic Cooperation and Development, 1750 Pennsylvania Avenue, NW, Washington, DC 20006.

This provides numerous examples of collaboration between industry and universities, with outlines of institutional changes, mechanisms, and policies to stimulate their development.

Industry-Education Partnership Guidelines, 1986. Available from Massachusetts Department of Education, Bureau of Student, Community, and Adult Services, Community Education Office, 1385 Hancock Street, Quincy, MA 02169; (617) 770-7581. This guide provides an overview of partnerships, outlines steps for developing them,

suggests strategies for success, and lists a variety of resources.

Investing in Our Children: Business and the Public Schools. Available from Committee for Economic Development, 447 Madison Avenue, New York, NY 10022; (212) 688-2063.

Jensen, Mary C. *Salem Program Demonstrates Five Keys to a Successful Business-School Partnership. OSSC Bulletin Series.* Eugene, OR: Oregon School Study Council, September 1985. ED 261 459. Available from Oregon School Study Council, University of Oregon, 1787 Agate Street, Eugene, OR 97403.

Justiz, Manuel J., and Marilyn C. Kameen. "School-Business Partnerships: Working to Defuse the Dropout Time Bomb." *NASSP Bulletin* 70.494 (December 1986), pp. 103-08. EJ number not yet assigned. Available from National Association of Secondary School Administrators, 1904 Association Drive, Reston, VA 22091.

Lacey, R. A. *Becoming Partners: How Schools and Companies Meet Mutual Needs.* Washington, DC: National Commission for Employment Policy, 1983.

Fearful that the recent upsurge in school/business collaborations may bring rapid disillusionment, the author seeks to identify the key factors that can sustain and strengthen the partnership trend. His central thesis is that success hinges on sufficient attention to "process" issues.

Levine, Marsha. "Business and the Public Schools." *Educational Leadership* 43.5 (February 1986), pp. 47-48. EJ334205. Available from University Microfilms International, Article Copy Department, 300 North Zeeb Road, Ann Arbor, MI 48106; (800) 521-3042.

Mann, Dale. "Building School-Business Coalitions That Pay Long-Range Dividends." *NASSP Bulletin* 70.490 (May 1986), pp. 1-5. EJ 337 482. Available from National Association of Secondary School Administrators, 1904 Association Drive, Reston, VA 22091.

McNett, I.E. *Let's Not Reinvent the Wheel: Profiles of School/Business Collaboration.* Washington, DC: Institute for Educational Leadership, 1982.

The theme of this publication is expressed in the title of its concluding chapter, "Many Wheels for Many Tasks." Well-chosen specific examples as well as more general discussions enlighten the reader about the problems, barriers, and successes of partnerships.

McPherson, Bruce. *School Reform and Higher Education. Boston, MA:* Association of Independent Colleges and Universities in Massachusetts, 1984. Available from Association of Independent Colleges and Universities in Massachusetts, 11 Beacon Street, Boston, MA 02108.

This publication recommends ways that colleges and universities can improve precollegiate schooling; it covers recruitment, curriculums, administration, admission standards, incentives, and resources.

Northwest Regional Educational Laboratory. *Partnerships: Schools and Businesses Collaborate for a Healthy Economy—Ideas for Action in Education and Work.* Portland, OR (September 1985), 11 pages. ED 264 437. Available from ERIC Document Reproduction Service, 2900 Wheeler Avenue, Alexandria, VA 22304.

O'Connell, Carol. *How to Start A School/ Business Partnership.* Fastback 226, Phi Delta Kappa Educational Foundation, 1985.

Otterbourg, Susan. *School Partnerships Handbook.* Available from Prentice-Hall, Inc., Order Dept., 200 Old Tappan Road, Old Tappan, NJ 07675.

Ozman, Howard. "Adopt-a-School: Definitely Not Business as Usual." *Phi Delta Kappan* 63.5 (January 1984), pp. 350-51.

Partnerships in Education. Available from U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202; (202) 472-7490.

This gives information on partnerships across the nation.

Partnerships in Education, A Handbook. Available from the Public Education Fund, 600 Grant Street, Suite 4444, Pittsburgh, PA 15219.

A joint effort of government and educational foundations, this booklet provides a succinct overview of partnership programs and practical advice for starting, nurturing, and expanding them.

Partnership: A Publication of the Center for School-Business Initiatives. Available from Center for School-Business Initiatives, 90 Madison Street, Worcester, MA 01680.

This newspaper highlights school/business partnership activities in the Worcester area with reports on relevant education studies.

The Private Sector Youth Connection, Volume 1: School to Work, A Planning Manual for Educators and Business People. Available from Vocational Foundation, Inc., 44 East 23rd Street, New York, NY 10010.

"Nuts and bolts" explanations of 55 partnerships and how they work are featured in this publication.

ProEducation: The Magazine About Partnerships with Education. Available from ProEducation Publications, 5000 Park Street North, St. Petersburg, FL 33709.

This quarterly magazine, founded in 1984, grew out of the business community to encourage school/business partnerships from within business. It highlights outstanding programs throughout the nation.

Progress Through Partnership, 1984. Available from American Can Company, P.O. Box 3610, Greenwich, CT 06836-3610.

This student-produced version of American Can Company Annual Report includes information about the company's Join-A-School partnership with Martin Luther King, Jr., High School in New York City.

Purcell, Elizabeth A., et al., eds. *Partners for the 80s, Business and Education.* Alexandria, VA: National School Volunteer Program, 1981.

Brief descriptions of 24 programs located throughout the country, including cost and staffing requirements, are provided.

Ruffin, Santee C., Jr. "School-Business Partnerships: Laying the Foundation for Successful Programs." *School Business Affairs* 50.2 (February 1984), pp. 14-15, 38-40. EJ 294 894. Available from United Microfilms International, Article Copy Department, 300 North Zeeb Road, Ann Arbor, MI 48106; (800) 521-3042.

Schilit, H., and R. Lacey. *The Private Sector Youth Connection.* New York: Vocational Foundation, 1982.

This well-organized review explains 55 tested school/business partnerships and how they were implemented. It includes a resource list.

School and Business Partnerships, Phi Delta Kappa Exemplary Practice Series. Bloomington, IN: Phi Delta Kappa Center on Evaluation Development and Research, 1985/86.

This series features selected articles from a rich variety of sources offering perspectives on partnerships, a sampling of collaborative programs, and ideas for development.

School-Business Partnerships: Why Not? Laying the Foundation for Successful Programs. Available from National Association of Secondary School Principals, 1904 Association Drive, Reston, VA 22091.

Schools and Communities Working Together to Enrich K-12 Education, 1986. Available from Massachusetts Department of Education, Bureau of Student, Community, and Adult Services, Community Education Office, 1385 Hancock Street, Quincy, MA 02169; (617) 770-7581.

This guide provides a model for partnership development, illustrated through three extended case studies and more than 30 profiles of a wide range of school/community collaborations.

Seeley, Davis S. *Education Through Partnership: Mediating Structures and Education.* Cambridge, MA: Ballinger, 1981.

The author outlines a necessary shift from school bureaucracy to collaborative relationships between teachers, students, parents, and citizens if we are to improve education for all students.

Shelton, Cynthia W. *The Doable Dozen*. Available from National Community Education Association, 119 North Payne Street, Alexandria, VA 22314; (703) 683-6232.

Successful School Business Partnerships. Available from Private Sector Initiatives, Eileen Doherty, Room 151, White House, Washington, DC 20500.

A Sure Bet: Business and Education Together. Available from California Chamber of Commerce, 1027 Tenth Street, Fourth Floor, P.O. Box 1736, Sacramento, CA 95808; (916) 444-6670.

This publication serves as a handbook for Chamber of Commerce education committees.

Tapper, Donna M. "Collaborative Efforts of Business and the New York City Public High Schools." In *Trends and Forecasts*. New York: Community Council of Greater New York, June 1985. ED 271 526. Available from ERIC Document Reproduction Service, 2900 Wheeler Avenue, Alexandria, VA 22304.

Timpane, Michael. "Business Has Rediscovered the Public Schools." *Phi Delta Kappan* 65.6 (February 1984), pp. 389-92.

Timpane, Michael. *Corporations and Public Education in the Cities*. Carnegie Corporation of New York, 1982.

This well-researched and thoughtful account covers the history, the typology, major problems and successes, and policy issues inherent in urban school/business partnerships.

The Workplace in the Community Newsletter. Available from Volunteer—The National Center, 1111 North Ninth Street, Suite 500, Arlington, VA 22209; (703) 276-0542.

Wynne, George E. "School-Business Partnerships: A Shortcut to Effectiveness." *NASSP Bulletin* 70.491 (September 1986), pp. 94-98. EJ 340 022. Available from National Association of Secondary School Administrators, 1904 Association Drive, Reston, VA 22091.

Parent-School Partnership Resources

Citizen Action for Education. Schools Where Parents Make A Difference. Available from Institute for Responsive Education, Box N, 605 Commonwealth Avenue, Boston, MA 02215.

Core Components of the Employability Development Plan: A Position Statement and Resource Guide on Involvement of Parents and Other Citizens in the Educational System. Available from Michigan Department of Education, P.O. Box 30008, Lansing, MI 48909; (517) 373-1806.

The Forgotten Factor in School Success—The Family. Available from Home and School Institute, Special Projects Office, 1201 16th Street, NW, Washington, DC 20036; (202) 466-3633.

Partners for the 80's: Handbook for Teachers. School Volunteer Program: Everything You Need to Know to Start or Improve Your Program. Volunteers and Children with Special Needs. Available from National School Volunteer Program, Inc., 701 North Fairfax Street, Suite 320, Alexandria, VA 22314; (703) 836-4880.

Shared Governance: Active Cooperation for a More Effective Education. Available from Salt Lake City School District, Office of Volunteers and Public Communications, 440 East First South Street, Salt Lake City, UT 84111; (801) 328-7352.

Organizations

Center for Organizational and Community Development
Room 225 Furcolo Hall
University of Massachusetts
Amherst, MA 01003
(413) 545-2038

This center, located in the university's School of Education, conducts research on partnerships, assembles case studies, and provides training in the many developmental stages of partnerships. It also distributes articles and publications on partnerships, with a strong focus on building networks.

Chamber of Commerce of the U.S.
Public Affairs Department
1615 H Street, NW
Washington, DC 20062
(202) 659-6152

The Chamber of Commerce of the U.S. promotes business and economic education as well as school/business partnerships.

City Wide Educational Coalition
37 Temple Place, #523
Boston, MA 02111
(617) 542-2835

An independent citizen group dedicated to excellent, integrated public education in Boston, the coalition provides information, works with decision-makers, and encourages objective media coverage. It publishes a newsletter of interest to Boston residents and those looking for interaction with schools.

The Conference Board
845 Third Avenue
New York, NY 10022
(212) 759-0900

This business-supported research organization produces annual studies of corporate public involvement; for instance, "Educating Students for Work: Some Business Roles."

Explorer Scouts
Boy Scouts of America
1325 Walnut Hill Lane
Irving, TX 75062-1296
(214) 659-2000

This branch of the Boy Scouts of America offers after-school career exploration programs with business representatives.

Institute for Responsive Education
605 Commonwealth Avenue
Boston, MA 02215
(617) 353-3309

This nonprofit organization, housed at Boston University, promotes citizen participation in educational decision making and school improvement. It conducts studies, provides training, and distributes publications on these topics as well as on school effectiveness and school/university programs.

Junior Achievement, Inc.
550 Summer Street
Stamford, CT 06902
(203) 359-2970

Business volunteers present courses in economics and provide experiences with running small businesses.

Massachusetts Department of Education
1385 Hancock Street
Quincy, MA 02169

Bureau of Student, Community, and Adult Services
Community Education Office
(617) 770-7581

Collaborations for Management Training
Commonwealth Leadership Academy
Office of Professional Development
(617) 770-7569; (413) 739-7271

Michigan Economic Education Council
Sill Hall Annex
Eastern Michigan University
Ypsilanti, MI 48197
(313) 487-4330

The council offers free information on making economic and business education a part of the curriculum.

Michigan Youth in Government
719 Lott Road
Coldwater, MI 49036
(517) 279-9839 or (517) 639-4325

This year-long program gives high school students firsthand experience with Michigan's legislative and judicial systems.

National Alliance of Business
1015 15th Street, NW
Washington, DC 20005
(202) 289-2910

The National Alliance of Business has a publications list available that describes thousands of valuable ideas, resources, and contacts in job training, education, and economic development nationwide.

National School Volunteer Program
701 North Fairfax Street, Suite 320
Alexandria, VA 22314
(703) 836-4880

Public Education Fund
600 Grant Street, Suite 4444
Pittsburgh, Pennsylvania 15219
(412) 391-3235

A national organization, the fund is an excellent resource for assistance in establishing local education funds/foundations and intermediate organizations that link school systems with community resources.

The QUEST National Center
6655 Sharon Woods Road
Columbus, OH 43229
(614) 882-6400

The center provides free information on character education for junior and senior high school.

School Volunteers for Boston, Inc.
25 West Street
Boston, MA 02111
(617) 451-6145

This organization has provided direct services to Boston Public Schools for 20 years. It offers technical assistance in developing partnerships, career/role model speaker programs, mentors, reading aloud, intergenerational programs, and innovative models of employee volunteering with minimum time away from the worksite.

Springfield School Volunteers
195 State Street
Springfield, MA 01103
(413) 787-7015

Thomas Jefferson Research Center
1143 North Lake Avenue
Pasadena, CA 91104
(818) 798-0791

The center offers free information on character education, especially for the elementary grades.

National Partnerships

Administrators' Leadership Academy—South Carolina
South Carolina Department of Education
701 Rutledge Building, 1429 Senate Street
Columbia, SC 29201
(803) 758-5805

The Academy identifies businesses that are willing to allow school administrators to participate in their management training programs. Banks, utilities, manufacturers, and other businesses provide free technical assistance and training programs in time management, communication skills, effective writing and meeting skills, problem analysis/decision making, strategic planning, and other areas of management.

Atlanta Partnership of Business and Education, Inc.
University Plaza, Urban Life 735
Atlanta, GA 30303

Founded in 1981, the partnership is an agreement between the Atlanta Public Schools, private businesses, churches and synagogues, PTA groups, and colleges and universities. Activities include an extensive adopt-a-school program; an affirmative action job placement program for low-ranking high school seniors; eleven magnet schools offering specialized programs in communications, financial services, science and mathematics, international studies, performing arts, and information processing and decision making. A National Humanities Faculty Program focuses on critical thinking.

The Boston Compact
Boston Private Industry Council, Inc.
110 Fremont Street
Boston, MA 02108
(617) 423-3755

The Boston Compact is an effort by area businesses, colleges, and schools to improve the basic skills of Boston high school students and make them better equipped to enter and prosper in the world of work. The business community gives hiring priority to Boston high school graduates. Area colleges and universities work with the school staffs to ensure that students are aware of

college as an option and know how to apply, prepare for standardized tests, and get financial aid. In return, the school system has undertaken efforts to improve (1) daily attendance, (2) the dropout rate, (3) academic preparation, (4) the number of graduates attending college, and (5) the number of students being placed in jobs. The program consistently meets or exceeds its annual goals.

California Roundtable
575 Market Street, Room 1948
P.O. Box 7643
San Francisco, CA 94119-7643
(415) 974-5721

This is a statewide organization of the chief executive officers of California's principal businesses. It conducted a major study of student performance in the state and spearheaded a major educational reform movement with the state legislature. To help increase business involvement with the schools, the California Roundtable compiled a massive "Catalogue of Business and Community Programs in Support of Local Education."

Cincinnati Public Schools
230 East Ninth Street
Cincinnati, OH 45202
(513) 369-4000

Greater Cincinnati Chamber of Commerce
1706 DuBois Tower
Cincinnati, OH 45202
(513) 241-9111

Through a special program in this school district, businesses donate time and expertise to a school that they "adopt." Scientists from a hospital research foundation work with elementary teachers to design curricula integrating the facilities of the hospital and the zoo into lesson plans. Cincinnati Bell Telephone helps junior high staff select computer hardware and software and adapt programs to the students. Westin Hotel provides incentives to seventh-grade students and their teachers for perfect attendance. Attorneys expose elementary students to the federal courts and city planning processes.

Education for Employment—Wisconsin
Education for Employment
Wisconsin Department of Public Instruction
125 South Webster; P.O. Box 7841
Madison, WI 53707-7841
(608) 266-9897

Education for Employment is a statewide legislated initiative in Wisconsin that requires all school districts to integrate into the K-12 public school system the following elements: business and education partnership activities; the practical application of basic skills in both the general and vocational curriculum; employability skills and attitudes; knowledge of business operations and practical economics; school-supervised work experience; career exploration, planning, and decision making; and contemporary vocational programs. The initiative requires each district to form a business and education partnership council comprised of at least one-half business representatives. The council is responsible for promoting partnership activities and developing a local plan to integrate the elements of education for employment.

Houston Independent School District
Business/School Partnerships
3830 Richmond Avenue
Houston, TX 77027
(713) 626-2950

Businesses "adopt" specific schools and aid them through tutoring, teaching assistance, and special projects. The Museum of Fine Arts hosts special arts training for volunteers interested in working with handicapped students. The activities of Tenneco, Inc., are designed to reduce absenteeism and the number of dropouts, to boost student achievement, and to provide a positive view of work in general and business in particular. Shell Production Research employees teach computer languages to gifted students, lecture in scientific areas, and update science teachers. Other businesses coach minority students in basic skills, teach employability skills, and provide internships for handicapped students.

The Learning Bridge—San Francisco
1000 Cayuga Avenue
San Francisco, CA 94112
(415) 565-9693

The Learning Bridge links San Francisco State University with one of its "feeder" high schools. The partnership involves curriculum development by faculty teams from both institutions,

faculty development in educating minority youth, and motivation of students to become more interested in their studies and better prepared to succeed in college.

Memphis City Schools Adopt-A-School Program
Adopt-A-School, Memphis City Schools
2597 Avery Avenue
Memphis, TN 38112
(901) 454-5364

All the public schools in Memphis have been "adopted" by one or more businesses, civic groups, religious organizations, and military installations. Several special programs of the public schools, including programs for the visually limited, the hearing impaired, and elementary guidance counselors, have also been adopted.

The New York Alliance for the Public Schools
Press Building, Fifth Floor,
32 Washington Place
New York, NY 10003
(212) 598-2712

The New York Alliance for the Public Schools involves businesses, community and civic leaders, the Board of Education, the United Federation of Teachers, the Council of Supervisors and Administrators, the United Parents Association, and a consortium of New York City universities to strengthen the quality of education in New York City Schools. A major bank funds a program of professional development for all high school principals. Computerlink, a computerized data bank, links every classroom with the resources of nearly 2,000 faculty members of the universities. "Go Public!" is a privately funded public information campaign to promote the city schools.

Partners in Education—Indianapolis
Indianapolis Chamber of Commerce
320 North Meridian Street
Indianapolis, IN 46204
(317) 267-2930

"Partners in Education" is a joint venture of the Indianapolis Chamber of Commerce and the Indianapolis Public Schools to pair businesses with individual schools or with the entire school system. Business involvement has helped raise student test scores, increased attendance, and helped the schools meet their curriculum objectives. Among the more than 100 businesses involved, local newspapers provide lessons in critical thinking using the newspaper. Banks instruct students on the principles of banking and the use of savings and checking accounts. The Kiwanis Club gives special awards for improved academic achievement. Eli Lilly and Company impacts its adopted high school through career awareness, fine arts appreciation, Big Sisters/Big Brothers, inservice training of teachers, motivational speakers, and other diverse activities.

Philadelphia Alliance for Teaching Humanities in the Schools (PATHS)
400 Suburban Station Building
1617 J.F. Kennedy Boulevard
Philadelphia, PA 19103
(215) 665-1400

This coalition of businesses, universities, and the Philadelphia Public Schools serves as a national model for improving humanities instruction in urban school districts. It includes the development of a writing curriculum, extended training in the teaching of writing for teachers from all subject areas, and writing workshops for high school students conducted by well-known Philadelphia writers. PATHS also provides minigrants for teachers and awards to school buildings for humanities-related projects.

Project PENCIL—Nashville
237 French Landing Drive
Nashville, TN 37228
(615) 242-3167

Committed to a strong public school system, representatives from business, education, and civic organizations formed Public Education Nashville Citizens Involved in Leadership (PENCIL) to establish an adopt-a-school program in all 128 public schools. A competitive teacher awards program gives as much as $5,000 per applicant for the most imaginative and innovative plans for professional development during the summer months. Support for the awards comes from the Hospital Corporation of America Foundation.

Public Education Fund—Pittsburgh
600 Grant Street
Pittsburgh, PA 15219
(412) 391-3235

The Public Education Fund (PEF) was established to award grants and provide technical assistance to communities wishing to create local tax-exempt education foundations for school improvement activities. The grants support a wide range of activities, such as curriculum development, public information campaigns, adopt-a-school programs, teacher minigrants, and fund raising. Michigan communities that have received PEF funding include Detroit, Flint, and Jackson.

Ryerson Teacher Work/Learn Program
Steel Service Center Institute
1600 Terminal Tower
Cleveland, OH 44113-2229
(216) 694-3330

The Ryerson Teacher Work/Learn Program is designed to expand teachers' textbook concepts of the free enterprise system and give them a better understanding of how business operates. Teachers are hired each summer by Ryerson centers around the country. They receive on-the-job experience and observe all operations and management practices. Transferring their experiences to the classroom can help students become better educated consumers and more productive future workers. A "how-to" kit has enabled other companies to sponsor similar programs.

Corporate Partnerships

• **American Can Company Foundation** takes risks—and those risks might benefit your school system in the not-too-distant future. The foundation gives "large, one-time, high-risk, high-visibility grants that influence public policy and the way we view education," says Foundation Vice President Peter Goldberg.

One case in point: The foundation gave $175,000 over several years to a collaborative program between 21 Westchester (New York) school districts and the State University of New York, Purchase (SUNY-Purchase). The program provides summer institutes in mathematics and science, arts programs, training for teachers and guidance counselors, and other programs the school systems could not afford on their own.

"We have nine major programs going on. There's a tremendous amount happening, and we benefit from doing these things together," says Mary Beth Anderson, assistant to the director of the SUNY-Purchase/Westchester collaborative program. "In a one-year period, the partnership served 400 teachers and 400 administrators. Other companies have provided support, but American Can got us going and is providing the core support to keep us going."

Why that project? Peter Goldberg explains, "It's a partnership among very diverse school districts and between school districts and a college. It's a model for the state university system, which has campuses all around the state, and perhaps a national model as well."

The foundation also gave $87,000 to the Institute for Educational Leadership in Washington, DC, for last year's study, "School Boards: Strengthening Grass Roots Leadership." Says Goldberg, "School boards are an important institution that had not been a strong actor in the school reform movement. The study helped people realize the role and potential of the school board." To make sure the study does not merely sit on a shelf, the foundation also sponsored three forums in different parts of the United States so the report's recommendations could be discussed more fully.

The foundation also gave $114,000 to the American Federation of Teachers (AFT) to plan and develop an "innovative, collaborative effort" between the union, local school systems, and colleges in six communities. The purpose: to attract into the teaching profession liberal arts students who might otherwise choose a different career. AFT's teacher recruitment and internship program offers scholarships and fellowships to help students pay for graduate work, intensive summer sessions to prepare students for teaching, and release time for young teachers to work with mentors who have been trained in effective teaching.

One final example: The foundation supported the Northeast-Midwest Institute, a center for regional policy, in the development of a monograph series on education and the economy. Of special interest is the publication called "Education Inc.: How Schools Strengthen the Local Economy." The booklet encourages school board members and

administrators to calculate the economic impact of their school systems on the community—to show that schools themselves are a major contributor to the local economy.

"We have a different approach to corporate philanthropy," says Goldberg. "We want to give it as much attention as we do any other corporate function. We also believe that public schools are incredibly important to the functioning of a democratic society. So we're not just giving $2,000 or $3,000 here or there; we're putting our money and our credibility on the line, knowing full well all the projects we're funding are not guaranteed to succeed."

For more information, contact: Peter Goldberg, Vice President, American Can Company Foundation, American Lane, P.O. Box 2600, Greenwich, CT 06836; (203) 552-2000.

• **Burger King Corporation** believes it is important to recognize excellence in teaching and school administration. Its three-year-old national program, "In Honor of Excellence," brings together outstanding public school teachers and secondary school principals for a five-day symposium each year.

"Our country's educators have all too often been neglected and insufficiently appreciated for their efforts," says a company spokesperson.

Participants say the symposium, which features guest speakers and offers a chance for professional development, is of high quality. "The conference was very valuable," says one teacher. "It has been one of the peak experiences of my professional career to date."

Burger King does not select the educators. Rather it honors teachers already chosen as Teacher of the Year in each state—a program sponsored by the Council of Chief State School Officers. (Maryland does not participate.) The principals honored are chosen either by state branches of the National Association of Secondary School Principals or by a principals' committee using criteria established by the principals' association.

The theme of the most recent conference was "Improving the Workplace." Burger King expects to have available a final conference report that includes recommendations for developing more rigorous professional standards for teachers and for broadening the decision-making process in schools. The company also is producing a one-hour videotape, based on interviews with some of the honorees, that can be used as a professional development tool. (The videotape will be available for a small charge, for duplicating and mailing.)

Burger King has another national program aimed at helping its young employees get an education beyond high school. More than 200,000 employees—some 70 percent of the company's work force—are between the ages of 16 and 20. The "Crew Educational Assistance Program," begun at company-owned restaurants in 1985, enables hourly employees to earn bonus credits of as much as $2,000 during a two-year period. The credits may be applied toward education expenses at a licensed or accredited college, university, vocational school, or technical school. To be eligible, employees must work for three months, average at least 15 hours of work a week, and maintain at least a C average if they are enrolled in school. To date, nearly 10 percent of Burger King's eligible employees have signed up for the program.

The company wants to persuade its 1,500 franchise owners to participate in the educational assistance program also, and it is offering staff assistance to help them implement the corporate plan.

For more information, contact: Burger King Corporation, Public Relations Deptartment, P.O. Box 520783, Miami, FL 33152.

• **Chevron Corporation** is the place to go if you're looking for high-quality, teacher-tested supplementary classroom materials that are free of corporate hype as well as free of charge.

Chevron itself produces the educational programs it provides free to schools across the United States. The programs, which have nothing to do with oil, are "conceived and produced by creative teams at Chevron who are intent on giving teachers stimulating, state-of-the-art classroom materials," says W.G. Toland III, manager of the company's community affairs division.

Some of the films are so good they have won major national and international broadcasting awards. And because Chevron creates the films and accompanying materials, it has direct control

over project development. Its educational materials have been "refined through classroom testing," Toland says.

Reports one Philadelphia teacher, "I find the films to be of very high quality, and the teachers' guides and other materials are among the most thoughtful I've seen."

Chevron first became involved in producing educational materials almost 60 years ago, in 1928, when it began the radio program, *Standard School Broadcast*. Chevron then began sending schools records, filmstrips, and tapes—on history, music, and the arts—keeping up its efforts even during financial hard times.

Some of the 35-millimeter filmstrips still are available, along with accompanying audiocassettes and teacher guides and posters. *Images of America* is a series devoted to the history of life in America, with an emphasis on dress, food, the city, and war. *Careers in the Arts* is a filmstrip series of four programs designed to "explore the pleasures and pains" of a career in the arts. The company keeps a "limited supply" of these filmstrips on hand.

Chevron also makes available a variety of half-hour videotapes that are beamed to schools by satellite through the instructional television network of the Public Broadcasting Service (PBS). The programs include *Jazzmakers*, which celebrates America's unique contribution to the world of music, and the *What is Economics?* and *What is History?* series, which explore the subjects themselves and encourage students to hone their thinking skills. A new series, *Spirit of the Land*, examines the heritage of American Indian cultures, beginning with the Yup'ik Eskimos of western Alaska and including native Hawaiians. Schools may record these programs on an unlimited basis. Each program also comes with a teacher guide.

Chevron also underwrites a yearly series of four, hour-long *National Geographic Specials* on PBS. Last year, for the first time, the *National Geographic*, with Chevron's cooperation, allowed schools and other nonprofit education institutions to tape the telecasts off the air, free of charge. Chevron provides a free resource guide, prepared by *National Geographic*, that contains brief background pieces by those involved in making the films as well as synopses, suggestions for activities and classroom discussions, and selected bibliographies.

In addition, the oil company has a number of films on oil and energy issues. *The Refinery Film*, for example, is a look at hundreds of useful products made from crude oil. *The Energy Experience* is an overview of energy use and development through the centuries. Some of the films are available in 16-millimeter and videotape formats, and many are accompanied by teacher guides. For free rental, contact: Modern Talking Picture Service, 5000 Park Street, North, St. Petersburgh, FL 33709.

All other materials are available from Chevron U.S.A., Inc., 742 Bancroft Way, Berkeley, CA 94710.

• **Metropolitan Life Foundation** has committed $4 million to try to improve school health programs to help children develop better health habits. The Foundation's "Healthy Me" program, a four-year project that began in 1985, gives awards for the development and implementation of "exemplary" school health education programs in schools across the United States.

"A good health education program can help children find their way through the often bewildering labyrinth of adolescence. It can help them become aware of the effects of alcohol and tobacco and of the far-reaching consequences of drugs on their personalities," says John J. Creedon, the company's president and chief executive officer. "Schoolchildren urgently need our help in developing good health habits. It's our job to make sure they don't become just another endangered species."

This year, as last, the company will offer public schools cash prizes and awards in two basic categories. Twenty awards of $5,000 each will be given to public school health programs that cover several grades and several topics; 15 awards of $3,000 each will be given to single-grade, secondary school health programs. Metropolitan Life also makes available, on a free loan basis, a *Healthy Me* film, which features some of the outstanding projects from previous years. The award-winning projects include innovative ideas that are easily adaptable to other schools and communities.

Says a Maryland teacher, "The really good health programs do more than just tell children about disease. Good programs emphasize the need to eat right, exercise, and really take care of yourself from an early age. I'm very impressed with the quality and comprehensiveness of the programs the company has selected."

Metropolitan Life began its "Healthy Me" project by surveying all public school systems in the United States to determine the nature and extent of school health programs. It found that only one-third of the nation's schoolchildren receive comprehensive health instruction. The survey also found that regular classroom teachers, who most often are involved in health instruction, are the least likely to receive training. As another part of the program, the foundation gives cash awards of up to $10,000 each for "professional preparation" programs. A public school system and a college that offers health education courses must apply jointly for a grant. The foundation then gives stipends for classroom teachers to attend classes and improve their skills. This two-year, $200,000 program concluded at the end of 1987.

Last year, the foundation also gave 20 grants of up to $5,000 each to community coalitions involved in comprehensive health instruction programs in public schools. The program is continuing this year.

The foundation's other main focus is public school teachers. "With all the talk about reforming education in the U.S., we realized that one very important voice was missing from the debate—that of the classroom teacher," says Creedon. The foundation recently released its third "Survey of the American Teacher," an ongoing attempt to "bring teachers' views to the attention of the American public and policymakers." The survey, conducted by pollster Lou Harris, analyzes the views of teachers and education leaders about the structure of the teaching profession and how that structure might be improved.

Metropolitan Life also has funded a number of other teacher projects: a film called *Where Have All the Teachers Gone?;* a teachers'catalog of creative program ideas; a proposed series of five forums to involve policymakers and educators in the debate over reforming teacher education programs; and a study called "The Teacher: Ally in Educational Reform."

For more information, contact Metropolitan Life Foundation, One Madison Avenue, New York, NY 10010-3690; (212) 578-7049.

• **Matsushita Electric Corporation** (parent company of Panasonic, Technics, and Quasar) has a foundation that knows just what it wants to do: improve teaching and learning in American schools.

The little-known foundation is committed to promoting excellence in education, especially in public elementary and secondary schools. Established in 1984, the foundation has a philosophy that "every young person has the potential to develop into a literate, thinking, and discerning adult with the skills and knowledge to be a productive and responsible member of society."

Given a $10 million endowment, the Matsushita Foundation spent its first two years awarding some $1.2 million in grants, some of them to public schools. The Rochester (New York) schools, for example, got $30,000 for a pilot junior high school staff development project using "teachers as partners."

But Sophie Sa, the foundation's executive director, says Matsushita's former grant-giving approach, with awards going to specific projects, has been revised. Now, she says the foundation will use its grants to help entire school systems make changes: "There are many good efforts going on, but many of them are piecemeal and unfocused." Her foundation will be looking, she says, to aid school systems that have a desire to change and would be "receptive to a foundation that will be quite intrusive."

Although not dictating the kinds of changes it wants to see, Sa says the foundation will focus on the "process" of change. "Many current efforts to change schools are inadequate because they're top down and outside in. We'd like to see school personnel—administrators, teachers, students, parents—assess their own needs, with assistance from any experts we might bring in," she explains. "Our role would be to prod a lot, to ask for justifications and rationales, to get people to think in the context of the whole."

The foundation's first priority will be to assist school systems with large populations and with economically disadvantaged students, either in urban or rural areas, she says. At this stage, the foundation is not soliciting formal proposals, Sa says, but she would like to talk "informally" with school systems interested in support from the Matsushita Foundation. "We'll engage in some long conversations first, to see if it's the kind of school system we can work with," she adds.

For more information, contact: Sophie Sa, Executive Director, Matsushita Foundation, One Panasonic Way, Secaucus, NJ 07094; (201) 392-4132.

Other Corporate Programs

The following section briefly describes other major corporate programs designed to help your schools.

- **General Electric Foundation** focuses on mathematics and science. Through the "Science Teacher Education at Museums" (STEAM) program, science museums and nature centers can receive planning and enrichment grants for the development or improvement of their training programs for science teachers. The foundation also has a minigrant program for teachers who have proposals for innovative approaches to mathematics education. The grants are administered by community foundations or public education funds. Contact Phyllis McGrath, General Electric Foundation, 3135 Easton Turnpike, Fairfield, CT 06431; (203) 373-3224.
- **General Motors (GM) Corp.** is interested in driver safety and education. Through its GM Driver Education Program, the company works with GM dealers and high school administrators to help supply cars for driver education programs. The company also recently introduced *In Motion*, a magazine for driver education students, which is published twice a year. Teacher guides come with it. The magazine is free. This year marks the company's fiftieth year of corporate involvement in driver education. Contact A.D. Stewart, Assistant Manager for Sales Promotion, General Motors Corp., General Motors Building, 3044 West Grand Boulevard, Detroit, MI 48202; (313) 556-3014.
- **GTE Foundation** sponsors "Growth Initiatives for Teachers" (GIFT), a grant program for secondary school mathematics and science teachers. A key feature of GIFT is its team approach: The team members—a mathematics teacher and a science teacher from the same school—submit a proposal that integrates the two subjects. The teachers also receive grant money for professional development to upgrade their knowledge. The program is available in Arizona, California, Florida, Indiana, Massachusetts, North Carolina, Texas, and Washington, D.C. Contact GTE Foundation GIFT Program, CN 6330, Princeton, NJ 08541-6330.
- **International Business Machines (IBM) Corp.** from time to time distributes educational materials to increase student understanding of IBM-sponsored television shows. For the science series called *Planet Earth*, shown on PBS stations last year, the company sent teacher manuals and student handouts to every senior high school in the United States. IBM also is sponsoring a new mathematics series, *Square One TV*, on public television. Contact Corporate Communications, IBM, Old Orchard Road, Armonk, NY 10504.
- **McDonald's Corp.** gives schools a variety of "creative, topical educational programs" at little or no cost. One recent effort: Two study-skills programs for grades 3-5 and 6-9 that help improve students' study habits, attitudes, and motivation. Each kit is for sale, but the materials can be duplicated for the whole class, so only one kit need be bought. Contact Nancy Gardner, Manager of Customer and Community Relations, McDonald's Corp., One McDonald Place, Oak Brook, IL 60512.
- **Phillips Petroleum Co.** has three highly regarded film series available. They are *American Enterprise*, a series of five films on the economic history of the United States; *The Search for Solutions*, a series of nine films that explores the problem-solving process in science and illustrates that science can be fun; and *The Challenge of the Unknown*, a series of seven programs on mathematics and problem solving. Teacher guides accompany the films, which are available on VHS and Beta videotape formats. The oil company provides videotape masters on

loan, and schools are free to copy them. Contact Karol Media, 22 Riverview Drive, Wayne, NJ 07470; (201) 628-9111.

- **Radio Shack,** a division of Tandy Co., offers training in computer literacy to educators at all levels. The training courses are held at Radio Shack Computer Centers across the United States. In 1983, the company started the "Tandy Educational Grants" program to support research and development activities that will further the use of computers in schools. All nonprofit educational institutions and all professional educators are eligible for the grants. Since the program began, Tandy has awarded more than $1 million in computer hardware and software. Contact Fran McGehee, Marketing Information Representative, Radio Shack, 1700 One Tandy Center, Fort Worth, TX 76102; (817) 390-3300.
- **Six Flags Corp.,** which owns Great America and other amusement parks, distributes "Read to Succeed" to 6,000 schools across the United States. Now in its second year, the program helps motivate students in grades 3-6 to engage in recreational reading by means of lively posters, filmstrips, stickers, activity cards, and worksheets. Three reading kits are mailed throughout the year. Contact Read to Succeed, Knowledge Unlimited, P.O. Box 52, Madison, WI 53701-0052; (800) 356-2302.
- **Time, Inc.** is sponsoring "Time to Read," a national pilot literacy program in which company volunteers are trained to tutor adolescents (and adults) using Time, Inc., magazines and a special manual as texts. The project now exists in six locations. Time also has extended its matching grants program to include, for the first time, public schools. Contact Taiga Ermansons, Corporate Community Relations Manager, Time, Inc., Rockefeller Center, New York, NY 10020; (212) 484-1453.
- **USA Today,** the Gannett Corporation's national newspaper, features "Classline," an education program that uses the newspaper as its basic text. It is not free, but the company has an active corporate sponsorship program to help schools underwrite the costs. Gannett also works with other companies on special projects. One example: Alcoa Laboratories is sponsoring "Scope," a science program in 11 cities that uses material produced by *USA Today* to help increase student interest in mathematics and science. Contact Sam Kades, Manager, Educational Services, *USA Today*, P.O. Box 500, Washington, DC 20044; (800) 368-3024, ext. 5316.

Economics Education Resources

The following resources were compiled from Indiana University-Purdue University, Center for Economic Education's *Economic Education Resources for Business Educators;* and from a listing compiled by Karen Prickette, Project Director for the Jefferson County Consortium Education for Employment Pilot Project.

Organizations

The Federal Bureau of Investigation

The bureau will send an agent to speak to classes.

Federal Bureau of Investigation
517 East Wisconsin Avenue
Milwaukee, WI 53202

Joint Council on Economic Education

This organization publishes materials designed for use in curriculum development and in-service training programs to introduce economics concepts into a variety of courses at all grade levels. A checklist is available with descriptions of curriculum guide items and other resources including video and test materials, microcomputer applications, and specific reference materials. The checklist can be obtained by contacting either the national or state council on economic education.

Joint Council on Economic Education
2 Park Avenue
New York, NY 10016
(212) 685-5499

William J. Hill, Executive Director
The Wisconsin State Council on Economic Education
1701 West Civic Drive
P.O. Box 591
Milwaukee, WI 53201
(414) 228-2090

Junior Achievement

Junior Achievement is a program operating in some parts of Wisconsin that has resources and materials available for teaching business operations and economics to elementary, middle, and secondary level students. Local business representatives visit classrooms and participate in the teaching of the curriculum. More information can be obtained by contacting the Wisconsin state office.

Junior Achievement of Southeastern Wisconsin
Thomas G. Dewar
Vice President of Operations
6924 North Port Washington Road
Milwaukee, WI 53217
(414) 352-5350

Small Business Development Center

Each university in the University of Wisconsin System has a Small Business Development Center. Any of these also may be contacted for additional information.

Small Business Development Center
University of Wisconsin-Extension
602 State Street
Madison, WI 53703

Wisconsin State Council on Economic Education

The council offers curriculum materials; awards for teaching excellence in economics; teacher training through university centers; and resources including leadership, service, and support for improving economic literacy. For more information contact William J. Hill, Executive Director (address listed above). In addition, Wisconsin has teacher training centers for economic education. For information about resources and programs available from these centers, contact the center nearest you.

UW-Milwaukee	Leon Schur	(414) 963-4678
UW-Whitewater	Don Silva	(414) 472-1355
UW-Eau Claire	Jerry Johnson	(715) 836-2726
UW-Green Bay	Margaret Laughlin	(414) 456-2137
UW-Oshkosh	James Grunloh	(414) 424-2441
UW-Platteville	Kahtan Al Yasiri	(608) 342-1547
Lakeland College	Ray Skrentny	(414) 656-1286
UW-Parkside	Richard Keehn	(414) 553-2259

The Wisconsin Taxpayers Alliance

The Wisconsin Taxpayers Alliance, organized in 1932, is a nonprofit, privately supported, nonpolitical organization dedicated to improving our system of representative government. To achieve this goal, the WTA conducts an extensive citizen-education program, with primary emphasis in the schools. The WTA also provides research and serves as a consultant on government administration, tax policy, and legislation for municipal officials, legislators, the news media, and various organizations. The WTA has no affiliation with any other national, state, or local organization.

The Wisconsin Taxpayers Alliance
335 West Wilson Street
Madison, WI 53703-3694
(608) 255-4581

Publications

Armento, Beverly, et al. *Teaching About the Japanese Economy*, 1986. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Designed to improve and enhance an understanding and appreciation of the Japanese economic system, this publication provides background information on geography, culture, and the educational system since they are important factors to the economy of Japan. (For junior and senior high school teachers.)

Banaszak, Ronald A., and Dennis C. Brennan. *Teaching Economics: Content and Strategies*, 1983. Available from Addison-Wesley Publishing, Menlo Park, CA.

This book is designed to help teachers better understand our economic system and to show how they can implement that knowledge into their courses.

Brennan, Dennis C. *A Survey of State Mandates for Economic Instruction 1985-86*, 1985. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

This booklet updates a 1981 study of the existence of mandates for instruction in economics, free enterprise, and/or consumer education at the elementary and secondary school levels within the United States.

Clow, John E., ed. *MCG Strategies: Consumer Economics (Secondary)*, 1985. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

This provides teacher overviews as well as classroom lessons that illustrate how concepts can be taught at various grades or at various levels of difficulty.

Consumer Information. Available from Consumer Information, P.O. Box 100, Pueblo, CO 81002.

This is a listing of free publications of the U.S. Government.

Consumer Economics material. Available from Department of Justice, Office of Consumer Protection, 114 East State Capitol, Madison, WI 53702.

The department offers a packet of free materials on this topic.

Dawson, George D., ed. *Economic Education Experiences of Enterprising Teachers*. Volumes 14-23. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Dawson et al., describe practical, dynamic, and creative ways to teach economics and address the

question of what economics and economic education are.

Economic Education for Future Elementary and Secondary Teachers: Basic Recommendations, 1985. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

This statement specifies the amount of preparation in economics for different types of economics instruction, the place of economics in the pedagogical training of teachers, and the need to include questions on economics in tests that states require for teacher certification.

Economics for Kids: Ideas for Teaching in the Elementary Grades. Available from The Joint Council on Economic Education (Stock No. 373), 2 Park Avenue, New York, NY 10016; (212) 685-5499.

This book, published by the National Education Association and the Joint Council on Economic Education, guides educators on how to introduce economic education into the elementary curriculum. It lists specific teaching activities that often complement the elementary social studies and mathematics programs. Also included are suggestions on using simulations and on using the local community as resources.

Economics Today. Available from Classline Hotline, 1 (800) 368-3024; In Wisconsin, 1 (800) 472-0141 or (414) 786-4998.

This guide shows how to use *USA Today* to make studying about how our economy works interesting and exciting for students. *USA Today* is the source of economic articles and information which will enable students to gain a better understanding of the economic world in which they live.

Elementary Economics. Available from Public Information Center, Federal Reserve Bank of Chicago, P.O. Box 834, Chicago, IL 60690; (312) 322-5112.

The Federal Reserve Bank of Chicago developed this bibliography to bring to your attention the excellent materials that are available to introduce your students to the exciting world of economics.

Federal Reserve System Public Information Materials. Available from Federal Reserve Bank of Chicago, Public Information Center, 230 La Salle Street, Chicago, IL 60690.

This comprehensive guide to materials is divided into general and specialized categories of interest to educators, bankers, economists, students, and the general public. Titles are arranged alphabetically within each category, and entries include information on content, target audience, and issuing Federal Reserve Bank(s). Materials are available free of charge unless otherwise indicated.

Ford, Lucille G. *Economics: Learning and Instruction*. Cincinnati, OH: South-Western Publishing Company, 1982.

Ford presents economic education concepts in an easily taught manner, and addresses elementary, secondary, and university levels of each economic concept.

Free Enterprise Resource Index. Available from The Free Enterprise Institute, 7575 East Fulton Road, Ada, MI 49355.

The Free Enterprise Institute, funded by Amway Corporation, dedicates itself to the communication and preservation of the principles that foster free enterprise activities.

A Guide to Tax Whys: Understanding Taxes. Available from Internal Revenue Service, Understanding Taxes Coordinator, P.O. Box 493, Milwaukee, WI 53201; (414) 291-3302 or 1 (800) 424-1040.

This series is designed to introduce secondary-level students and adult education groups to major issues of taxation. The series stresses the impact taxes have on individual consumers and producers.

Horwich, George, et al. *The Economics of Energy: A Teaching Kit*, 1983. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

This publication provides junior and senior high school teachers and students with essential information and concepts needed to help them analyze the energy situation from the perspective of economics.

Invent America. Available from U.S. Patent Model Foundation, 1331 Pennsylvania Avenue NW, Suite 903, Washington, DC 20004; (202) 737-1836.

This program, designed for kindergarten through grade eight students, helps students learn and apply problem-solving skills in developing new products.

Kourilsky, Marilyn L. *Understanding Economics*. Menlo Park, CA: Addison-Wesley Publishing, 1983.

In this booklet, Kourilsky presents a review of key economic concepts—scarcity, ownership, supply and demand, etc.—and provides suggested lessons on economic concepts and their implementation in the classroom.

Marketplace, 1984. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

This tutorial program presents lessons on price determination at three levels of complexity. Level One can be used in grades nine and ten. However, the higher levels and the computer tutorial as a whole are more appropriate for grades ten through 12. (For use with Apple II series.)

Materials Available to Educators 1985. Available from Midwestern Representative, Educational Service Bureau, Dow Jones and Company, Inc., One South Wacker Drive, Chicago, IL 60606; (312) 750-4000.

This listing of free materials is compiled annually as a service to the academic community. Each item has been evaluated to determine its usefulness to students and educators in business-related courses.

Munting, Roger. *The Economic Development of the USSR*. New York: St. Martin's Press, 1982.

A survey of the economic achievements of the Soviet Union since the Bolshevik Revolution of 1917, this booklet provides an impartial assessment of the merits and defects of the Soviet planning system.

Palmer, George E., ed. *Gifted and Talented: Projects From the Awards Program*, 1984. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Two unique and challenging educational programs, designed for teachers who work with gifted and talented children, are explained. Projects can be implemented as presented or adapted for an individual teaching situation.

Palmer, George E., and Joey A. Meihsner. *Projects By Concept: Economic Education Awards*, 1982. Available from National Depository For Economic Education Awards, Milner 184, Illinois State University, Normal, IL 61761.

This is a listing of the outstanding projects submitted to the annual National Awards Program for the Teaching of Economics competition. The projects are arranged by level: primary, intermediate, junior high, senior high, and college and university.

Perspectives. Available from Procter and Gamble Educational Services, P.O. Box 14009, Department E.Q.P., Cincinnati, OH 45214.

Perspectives are teaching units based on specific events or periods in history. These are designed to supplement textbooks in history, government, economics, and sociology classes in grades 7-12. Their objective is to give educators and students a personal glimpse of the parallel growth of our country and its business and industry.

Peterson, H. Craig. *Economics of Work*. Cincinnati, OH: South-Western Publishing, 1983.

Peterson describes the free enterprise system and the role of money in the economic system, discusses future job opportunities as well as types of income, and explains some of the ways government affects the operation of the system.

Peterson, H. Craig, and W. Chris Lewis. *Free Enterprise Today*. Cincinnati, OH: South-Western Publishing, 1985.

In this work, ideas are presented in a concept/example format that introduces the student to the basic principles of the free enterprise system. Easy-to-understand graphs, diagrams, and illustrations aid in explaining the strengths and weaknesses of free enterprise.

Riekes, Linda, et al. *Teaching About Credit: Activities for Secondary Classes*, 1986. Available from Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166.

Intended to provide teachers with classroom activities for teaching about credit, this publication includes several activity pages that give students opportunities to consider many decisions consumers must make when they use credit.

Schug, Mark C., ed. *Economics in the School Curriculum, K-12*, 1985. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

This booklet provides an understanding and application of fundamental economic concepts and principles to aid the professional economic educator in the decision-making process. It emphasizes the current position of economic education in the K-12 curriculum.

The Spirit of Free Enterprise. Available from Amway Corporation, 7575 East Fulton Road, Ada, MI 49355.

This guide is designed to assist teachers in introducing to students a few basic economic concepts and to focus student attention on the relationship between personal choices and economic freedom.

Stabile, Donald R., and Ho N. Nguyen. *ABCs of Economics*, 1984. Available from Maryland Council on Economic Education, Towson State University, Towson, MD 21204.

Stabile and Nguyen give concise explanations of economic issues in book form for distribution to teachers and high school students, look at the work of past and present well-known economists, and discuss micro- and macroeconomics as well as the U.S. role in the international economy.

Warmke, Roman F., and Eugene D. Wyllie. *Consumer Economics*, 10th ed. Cincinnati, OH: South-Western Publishing, 1983.

An overview of the roles of the individual, business, government, and foreign trade in the American economy, this book places special emphasis on the consumer activities of buying, saving, borrowing, investing, and insuring.

You Are the American Economic System. Available from The Advertising Council, 825 Third Avenue, New York, NY 10022, (212) 758-0400.

One in a continuing series of booklets being published by the Advertising Council, this is part of the council's public service campaign to help improve understanding of the American economic system among Americans everywhere—at home, at work, in the schools, and in the community. Its purpose is to explain a sometimes complex subject in purposely simple terms.

Additional series available are:
The American Economic System and Your Part In It,
Inflation and Your Part In It,
Employment and Your Part In It, and
Productivity and Your Part In It.

Your Guide for Teaching Money Management. Available from Money Management Institute, Household International, 2700 Sanders Road, Prospect Heights, IL 60070.

Money Management prepares and distributes educational materials including booklets, filmstrips, and leaflets that cover the most important areas of personal and family finance.

Films and Videotapes

Blue Bell, Inc./Wrangler. *There Are Choices*. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

This 18-minute film compares a small businessman and a large corporation. Each of these business entities faces the mutual problems of producing a product of good quality, of selling that product in a highly competitive market, and of making a profit in order to stay in business. A teacher's manual is included.

Bringing Customers and Products Together. Available from Video Tape Associates, 2351 SW 34th Street, Fort Lauderdale, FL 33312.

Is Anybody Listening? Many modern businesses have adopted the "marketing concept," which suggests that everything from product ideas to advertising campaigns should begin and end with the consumer. This 28-minute

film explores the marketing concept at a major consumer products company and looks at the operations from research and development to market testing. The film explores the process by which the company listens and responds to the wants and needs of the American consumer—because the consumer is the "ultimate boss" in the free-enterprise system. (Published by Procter & Gamble.)

The New Breed. This 30-minute film on physical distribution management was produced to create a better understanding of the critical role of physical distribution management in the modern business organization. Presented in a real-life setting, the film has built-in interest for most managers and business students seeking career opportunities in physical distribution management. (Published by Japan Air Lines.)

The Business System and Its Environment. Available from Video Tape Associates, 2351 SW 34th Street, Fort Lauderdale, FL 33312.

The Kingdom of Mocha. This 26-minute, animated film provides an entertaining introduction to basic economic concepts for beginning business students. Mocha is a mythical island on which delightful inhabitants experience rapid change as their economy develops from primitive barter to complex modern-day problems. Along the way the nature and mechanisms of the competitive-market economic system are explored. (Published by Standard Oil of Indiana.)

Organization. This 28½-minute film stresses the role played by organizers who molded our economy, our markets, and our standard of living. It stars William Shatner and was extensively researched by nine leading U.S. historians. It explores why Americans have a reputation for getting things done, and it looks at American willingness to take risks and to use capital to lower costs and prices while creating more jobs. The contributions of the corporate form of organization to our industrial economy are also recognized. (Published by Phillips Petroleum.)

Center for Economic Education of the University of Kansas. *Infrastructure*, 1986. Available from Associated General Contractors Education and Research Foundation, 1957 East Street, NW, Washington, DC 20006.

This filmstrip was developed to heighten the awareness of high school students about the infrastructure, the role it plays in our daily lives, and its significance in terms of our economic goals. It includes a cassette and teacher's guide.

Economics USA. Available from The Wisconsin State Council on Economic Education, 1701 West Civic Drive, P.O. Box 591, Milwaukee, WI 53201; (414) 228-2090.

A new 28-part television series called *Economics USA* has already been acclaimed by economists and educators as the best economics television course ever produced.

Establishing and Financing a Business. Available from Video Tape Associates, 2351 SW 34th Street, Fort Lauderdale, FL 33312.

The Fed—Our Central Bank. This 20-minute film goes behind the scenes to show how the Federal Reserve System (Feds) makes credit available for economic growth and jobs—managing money and credit, clearing checks, putting coin and currency into circulation, destroying old currency, supervising banks, and administering such consumer credit laws as Truth in Lending and Equal Credit Opportunity. The film also includes a sequence showing the open market operations of the Fed's New York Trading Room, where the Federal Reserve buys and sells government securities to keep the amount of money and credit in the economy in line with the nation's economic needs. (Published by the Federal Reserve System.)

One Man Band. In an entertaining cartoon format, this 15-minute film explores the development of a small business venture (The One Man Band) into a successful corporation that needs to raise funds from the public market. The nature and function of organized stock exchanges are explained in such a way that the student gains a basic understanding of the se-

curities market from the standpoint of both investors and corporations attempting to raise capital as well as the role of stock exchanges in bringing these two principles together. (Published by the New York Stock Exchange.)

Electronic Stock Exchange. The over-the-counter market is the nation's oldest and largest stock market, with more than 50,000 different issues being traded. Yet for many it is still mysterious and virtually unknown. This 13½-minute film shows how the over-the-counter market works and stresses the significance and application of the new NASDAQ system along with the improvements it has brought to people involved with investing in stocks and bonds. (Published by the National Association of Security Dealers.)

Friedman, Milton. *Free to Choose.* Available from Penn Communications Inc., 1350 West 20th Street, Erie, PA 16502.

The first half-hour of each of the ten programs consists of dramatic film footage and Milton Friedman's commentary. The second half-hour features a discussion between Friedman and invited guests, including people with strongly opposing views. Individual titles within the *Free to Choose* series are: *The Power of the Market; The Tyranny of Control; Anatomy of Crisis; From Cradle to Grave; Created Equal; What's Wrong With Our Schools?; Who Protects the Consumer?; Who Protects the Worker?; How to Cure Inflation;* and *How to Stay Free.*

Give and Take. Available from Agency for Instructional Television, Box A, Bloomington, IN 47402.

This classroom film series of 12 15-minute programs in personal economics is intended for use in consumer education, economics, business education, home economics, social studies, and other classes where personal economics material is presented. (Available in VHS and ¾-inch tapes.) Individual titles are: *You Choose/Scarcity and Personal Decision Making; We Choose/Scarcity and Social Decision Making; Let's Save/Opportunity Cost; Credit Wise/Opportunity Cost; Where Do Jobs Come From?/Derived Demand; A Key to Productivity/Human Capital; Private or Public?/Public Goods and Services; Changing Taxes/Public Goods and Services; Market Prices/Supply and Demand; The Changing Market/Supply and Demand; Take Your Choice/Substitution;* and *Why Competition/Market Structure.*

A Guide to Trade-Offs. Available from AIT, Box A, Bloomington, IN 47401.

Fifteen 20-minute color television/film programs are designed to teach economics to children nine to 13 years old.

Managing Information and People. Available from Video Tape Associates, 2351 SW 34th Street, Fort Lauderdale, FL 33312.

About Computers. This animated, 12-minute film is a primer on some of the basic elements of computers and data processing. It explains such concepts as the input, output, storage, and control functions of computers. Simple computer hardware and software are described, and the binary system is illustrated and defined in an understandable and graphic manner. It is a very basic introduction to the information explosion that has revolutionized modern business operations. (Published by the IBM Corporation.)

The Year They Discovered People. This 14-minute, retrospective documentary film was produced for the 50th anniversary of American industry's first comprehensive study of the attitudes of employees toward their jobs. It employs vintage pictures of the lifestyle of the Roaring Twenties, authentic and re-created factory film of the period, and scenes of present-day telephone equipment manufacturing to review the historical and sociological factors of the celebrated Hawthorne Studies. (Published by the Western Electric Company.)

The Challenge of Management. Students often enjoy a chance to meet the professors who have helped shape the discipline they are studying. In this 20-minute interview, Harold Koontz, chancellor of the International Academy of Management and one of the leading authors in the field of management, explains the diverse

knowledge and skills required for successful management. In an informal setting, Koontz explains the ideas behind his "management jungle" presentation that was recently identified as the most important management article ever written. Koontz also talks about the wide scope of challenging careers available in management. (Published by Executive Communications.)

New York Stock Exchange. *Market in Motion.* Available from MODERN Talking Picture Service, Inc., 1145 North McCadden Place, Los Angeles, CA 90038.

This 12-minute color film briefly outlines the capital formation process and explains how individuals play a role in this process.

Operating a Business in a Changing World. Available from Video Tape Associates, 2351 SW 34th Street, Fort Lauderdale, FL 33312.

Innovation. This 28½-minute film looks at the people who dreamed up the crazy inventions everybody laughed at . . . then bought. It recognizes the contributions of that special breed of person possessed with both vision and pragmatism who is able to take scientific principles and release the utility trapped inside. "Innovation" is result of both human and capital resources, and contributes to our economic goal of efficiency and well-being. America will continue to need this ability to meet challenges through better technology. (Published by Phillips Petroleum.)

A Firm of the Future. This 31-minute film describes how modern business methods—automated production, computerization, saturation advertising merchandising programs, data retrieval and information systems, product diversification, and scientific technology—are used to build a successful corporation and prepare it for the future. A comprehensive case featuring the growth of a small business venture is explored. (Published by Scott Liquid Gold.)

Pennywise. Available from SECA Center for Instructional Communications, Southern Educational Communications Association, P.O. Box 5966, Columbia, SC 29250; (803) 799-5517.

This series of 12 15-minute programs in economic education is designed for the primary grades.

People on Market Street. Available from Pacific Academy for Advanced Studies, 1100 Glendon Avenue, Suite 1625, Los Angeles, CA 90024.

Each film in this seven-part series probes an event that reveals an important economic concept, presented in an easy-to-understand language. Effective use of humor throughout the series holds attention and serves to reinforce a wide variety of economic issues. This series includes a teacher's guide and student worksheet books for each film. Individual titles are: *Wages and Production (18 minutes); Market Clearing Price (23½ minutes); Scarcity and Planning (16½ minutes); Cost (19½ minutes); Property Rights and Pollution (19½ minutes); Supply (20 minutes);* and *Demand (21½ minutes).*

Phillips Petroleum. *The American Enterprise.* Available from Phillips Petroleum Company, Public Affairs Department, Bartlesville, OK 74005.

Each 29-minute film in this five-part series covers a different aspect of America's economic history. The films detail how the United States, in its 200 years of independence, became a country with the greatest economic output in the world. Individual titles are: *Land; People; Innovation; Organization; Government.*

Understanding Advertising, 1981. Available from Glencoe Publishing Company, 17337 Ventura Boulevard, Encino, CA 81316.

Designed to make students aware of the various techniques ad makers use in their efforts to persuade them to buy, this filmstrip helps students see how the ability to analyze advertisements can help them make more worthwhile choices in the marketplace. It includes a cassette and teacher's guide.

Walt Disney Educational Media Company. *Managing Your Money, Banking, and Credit,* 1983. Available from Walt Disney Educational Media

Company, Attention: Warehouse, 10316 NW Prairie View Road, Kansas City, MO 64153.

This four-filmstrip set with accompanying cassettes, teaches junior and senior high students how to manage money and what buying on credit means.

Computer Software

Economic Education Software Sampler Series. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

This consists of five grade-specific units that provide a taste of what teaching economics with a computer is like. Each unit consists of a diskette and teacher's guide packed in a sturdy cardboard folder. Guides contain a brief overview of the economic concepts in the unit, directions for conducting the computer activities, suggestions for extension and evaluation activities, and materials for classroom use. For 48 Apple II, II+, or IIe with one disk drive, the DOS 3.3 operating system, and a monitor or TV (color or monochrome).

Program One: *Piggy Bank*, 1984 (Grades K-3). In this game with five levels of difficulty (players can choose level), students practice using number facts by counting various combinations of coins. Extension activities introduce attributes of money as well as concepts of exchange and saving. Sound is an option; a color monitor is desirable.

Program Two: *Hangman With Mr. Money*, 1984 (Grades 3-5). This word-recognition and spelling game introduces some basic terms in economics and their opposites. Sound is an option; a color monitor is desirable.

Program Three: *Choices*, 1984 (Grades 5-8). This monochromatic program presents the concepts of scarcity and opportunity cost and explains the need to make choices; gives students practice in systematic decision making with the aid of a five-step plan; and guides students in applying the plan to a given problem as well as to problems formulated by students. Students can use this program alone or with the *Trade-Offs* series.

Program Four: *Pete's Pizzeria*, 1984 (Grades 7-12). Two players or teams can play this quiz game. It is also suitable for self-testing and review by a single user or group and is intended to follow the completion of a classroom unit on business. The game tests student knowledge of matters concerning finance, advertising, location, product market research and development, and employment; reviews main characteristics of a market economy; and provides practice in calculating profit or loss, given dollar values of revenues and costs. A color monitor is desirable.

Program Five: *Marketplace*, 1984 (Grades 10-12). This tutorial on price determination has three levels of difficulty (user can choose level). It covers supply and demand and their determinants; effects of shifts in supply and demand on market price; and the effect on market price of pairs of substitute goods when there is a shift in the demand for or supply of one of the goods. A group or an individual can use the program for reinforcement and review; it is also suitable for class lecture/demonstration. The program includes sound and is not in color.

Incomes/Outcomes. Available from Joint Council on Economic Education, 2 Park Avenue, New York, NY 10016.

Incomes/Outcomes is a series of eight instructional computer lessons in economics for high school students designed to strengthen teacher and textbook presentations of key economics concepts. Supporting print includes a teacher's guide, student worksheets, and a workshop leader's handbook.

Program One: *Getting It Together* (Circular Flow). Using a computer-aided design (CAD) system, students construct a model of the circular flow of macroeconomic activity represented by ERSTAR, a space station in low orbit above earth. After "building" the model, students are guided through hypothesis formation and testing related to real flow within the model.

Program Two: *Economic Growth Pursuit* (Sources of Economic Growth). Students experiment with changing ERSTAR's economy, forming

and testing hypotheses about how to stimulate economic growth. They score points by creating correct hypotheses about which factors influence economic growth and about how those factors exert their influence.

Program Three: *Bank On It* (Saving, Investment, and Banking: Financial Intermediaries). Students analyze how interest rates affect investment decisions of producers and savings decisions of households. They adjust the interest rate in financial markets to balance the demand for and supply of loanable money. They discover how financial institutions facilitate the money flow from household savings to business investment and how financial intermediaries affect economic growth.

Program Four: *Balancing Act* (Market Analytics I). This program lets students apply a reasoning model to the problem of declining output on ERSTAR as they explore the relationships among interest rates, savings supplied, and loanable funds demanded. They vary interest rates to determine the market clearing rate of interest and discover the effects on economic growth of changing interest rates and investment.

Program Five: *What Might Happen . . .* (Market Analytics II). Students examine factors that can change the demand for and supply of loanable funds. They determine how changes in demand and supply affect the market clearing interest rate, investment, and economic growth.

Program Six: *Who Pays?/Who Gains?* (Government's Role in Economic Growth). Students help ERSTAR officials decide whether government-funded investment projects will increase economic growth and improve ERSTAR's quality of life. Ranking potential projects, students determine the opportunity cost of the project they prefer. After identifying the chosen project's investment category and cost, students decide how ERSTAR's government will fund it. Finally, they examine how their decisions affect ERSTAR's economic growth and quality of life.

Program Seven: *Macropol* (Macroeconomic Policy). Applying for the job of director of Macropol, students determine macroeconomic policy on ERSTAR, making policy decisions related to three variables: money supply growth, tax rate change, and changes in the level of government spending. A "macro model" of ERSTAR's economy predicts the impact of policy decisions on employment, growth, and investment. The model also yields a polling figure indicating how popular the student's directorial policy is on ERSTAR.

Program Eight: *Trade It* (International Trade). Students apply the concepts of absolute and comparative advantage and explore the benefits of foreign trade by examining the economic impact of specialization on ERSTAR and its conduct of trade with another space station. Interest groups and public and private institutional constraints may limit the extent of specialization. Terms of trade determine distribution of gains derived from specialization; these terms will depend on the two space stations' bargaining powers.

Miscellaneous

The Mini-Economy. Available from The Indiana Department of Education (for publication) or Instructional Video Service (for videotape), Office of School Assistance, 229 State House, Indianapolis, IN 46204.

This is a form of economics instruction in which students participate in a classroom economy in order to simulate real world economic activity. Using the practical 76-page publication, complete with reproducible Mini-Economy aids, students earn money in a variety of ways and spend it at a class store or auction integrating basic mathematics, language, decision making, creative thinking, and fine art skills.

Also, a 26-minute video presentation that documents the effectiveness of minieconomies in Indiana schools was taped on location in the schools and uses interviews with teachers and students intercut with scenes of actual use of class money; the operation of class banks, stores, and other businesses; the teaching of basic concepts; classroom management; and teacher expectations

and student outcomes. Videotapes are available in Beta, VHS, and ¾-inch.

Money Management: Your Savings and Investment Dollar. Available from Money Management Institute, Household International, 2700 Sanders Road, Prospect Heights, IL 60070.

Present money management materials include booklets, filmstrips, and leaflets that cover the most important areas of personal and family finance.

Talking Money Game. Available from Aid Association for Lutherans, 4321 North Ballard Road, Appleton, WI 54919.

This game about money is for ages 8 to adult.

Appendix H

Questions and Answers about Education for Employment

Following are some frequently asked questions pertaining to education for employment. The answers are limited. More comprehensive answers to and understanding of the questions will evolve as business representatives and educators work together to ensure that students are prepared for eventual independence and employment.

What is education for employment?

Education for employment is Wisconsin's attempt to produce the finest, most productive work force in America. Its purpose is to ensure that all students, regardless of career objective, are given the skills, attitudes, and knowledge needed for future employment. It begins as early as kindergarten and is infused throughout the curriculum until a student graduates.

The seven elements of education for employment are

- business and education partnerships;
- practical application of basic skills;
- career exploration, planning, and decision making;
- employability skills and attitudes;
- school-supervised work experiences;
- knowledge of business operations and economics; and
- contemporary vocational education programs.

How will education for employment help improve economic development in Wisconsin?

The quality of the work force is identified as one of the key factors for successful economic development. Education for employment is designed to help improve the quality of Wisconsin's labor force, especially at the job-entry level. It does this through business and education partnerships and the development of a comprehensive and integrated K-12 curriculum designed to prepare all students to be positive contributors to the economic condition of our state.

What happens if we don't implement education for employment?

We would have few or no changes in work preparation for our youth. This would jeopardize a portion of the state's economic development efforts and put our students at risk of being unemployed and unemployable. In the words of the chief executive officer of a Wisconsin manufacturing company, "What we do now to alter the ways we educate has everything to do with how many jobs we retain and how many new jobs we create. I want to re-emphasize the need for impatience and a willingness to embrace radical ideas as we deal with this need."

Aren't schools already teaching education for employment?

Yes, some components of education for employment already are being taught sporadically throughout Wisconsin's K-12 school system. In one sophomore English class, all students prepare job application letters and forms along with a resume. In another school, middle-school students visit a bank weekly as part of their mathematics class. They see how the bank operates, count change, and make deposits. They learn that each teller must balance the cash box at the end of the day, and if a mathematical error has been made, the teller is responsible for the difference. The students view practical applications of mathematics taking place and learn why it is important to be accurate. There are some elementary students who learn entrepreneurship by making a product and marketing it. But these are isolated examples.

Very few schools have all the components of education for employment in place in a systematic manner. Many of the good examples of education for employment already taking place are linked to a specific teacher's methods rather than district policy. Education for employment will help districts identify their own strengths and weaknesses in preparing students for careers. It will also help coordinate and substantiate the total program. It

will give distinction to what parents, employers, and educators have been saying all along—students need to understand why they are learning to speak, read, compute, and write. Our children deserve the opportunity to develop the characteristics they need to one day earn a living. Wisconsin's economic future depends on it.

How is education for employment different from vocational education?

Some vocational education programs have done an excellent job of preparing students for work. These programs have been targeted to a few specific occupations, however, and not all students have had the opportunity to participate. Education for employment will ensure that all students, regardless of age or career objectives, will have an opportunity to develop the skills and knowledge necessary for them to be productive workers. Vocational education is one component of education for employment.

The education for employment concept includes K-12 career exploring, planning, and decision making. Communitywide business and education partnerships and the practical application of basic skills contained in the K-12 curriculums enhance world-of-work simulations and experiences. These all promote lifelong learning, whether or not a student enters the work force directly from high school.

Most of the students in my school district are college bound. Why do we need education for employment?

First, all students will be entering the job market at some point in their lives. Students, whether college bound or not, need the skills to seek and keep employment. For those students who work while in college or who do not finish college, the knowledge and skills needed to get and hold a job are critical. In addition, college courses often do not address employability skills, attitudes, business operations, and economics, which all students need.

Second, education for employment is not asking for a reduction in the basic skills or a lessening of the importance of academics. In fact, it is doing the opposite. It is emphasizing that competency in reading, writing, and mathematics is important for *all* students, and that by offering practical applications to the world of work and exposure to various career choices within the existing curriculum, an important link between "learning" and "earning" will be made.

Isn't instilling a "work ethic" a responsibility of the family?

Yes. The family has an extremely important role in defining the work ethic for our youth. However, that does not mean that the school has no responsibility. The school must provide the opportunity to acquire the knowledge and skills necessary for successful employment.

What effect will an education for employment program have on a district's teaching staff?

All teachers will become responsible for applying the basic skills of their discipline to world-of-work situations and will be responsible for linking their discipline and courses to career possibilities and business partnerships. Each teacher's curriculum will be modified and updated to incorporate education for employment principles into all course units. A district will implement a long-term plan for staff development and inservice to support the staff in making the necessary changes.

How will education for employment affect postsecondary education and training?

K-12 schools must broaden their role in preparing youth for future jobs, and K-12 education leaders must view themselves as economic development leaders. But they cannot succeed alone. To accomplish these tasks requires a partnership with other school districts, postsecondary training institutions, universities, and business and industry. If schools are to provide all students with access to education for employment programs, including occupational training based on labor market information and student need, these partnerships are crucial. Resource sharing for skill training and further education needs will be a vital component of education for employment programs.

How do I start an education for employment program?

One of the major goals of education for employment is to create and foster relationships between education and business. The first step in developing a plan is to create an education for employment council, one-half of which is comprised of business and industry representatives. This council should be used to guide the infusion of education for employment principles into the entire K-12 curriculum. Districts and/or cooperative educational service agencies may join together and create a council instead of each district operating a separate council.

What other steps are necessary?

Once a council is developed, each district will identify its own needs based on labor market information and community resources. The Education for Employment Plan that is eventually established will be tailored to fit an individual district. A district will probably target its initial efforts toward developing the components of education for employment that are weakest within their community. Eventually when all components are in place, opportunities will exist to refine the plan and create optimum experiences for students.

What can I do to assist?

By working together—business representatives, administrators, teachers, students, legislators, and state agency representatives—we can provide every Wisconsin student with the opportunity to become an employable, productive citizen. The ultimate success of education for employment will depend on the cooperative and cohesive efforts of everyone involved. The ultimate success of education for employment will depend on how well we all work together.

Suggested Reading List*

Business and Education: Partners for the Future, 1985. Available from U.S. Chamber of Commerce, 1615 H Street, NW, Washington, DC 20062.

This publication concisely summarizes the chamber of commerce's positions on public education and its role in it. It provides good background information for working with a local chamber office.

Duggan, Paula, and Jacqueline Mazza. *Learning To Work: Improving Youth Employability*, 1986. Available from Northeast-Midwest Institute, 218 D Street, SE, Washington, DC 20003.

Duggan and Mazza explore ways that school, business, and government officials can work together to better prepare youth for employment.

Families Learning Together At Home and In The Community: Building Adult Knowledge and Children's Skills, 1980. Available from the Home and School Institute, Inc., Training Programs and Publications, c/o Trinity College, Washington, DC 20017.

The work of the Home and School Institute involves the community in education. This particular resource outlines ideas and strategies for that involvement.

Greenberger, Ellen, and Laurence Steinberg. *When Teenagers Work*, 1986. Available from Basic Books, Inc., 10 East 53rd Street, New York, NY 10022.

This book highlights what is important in teenage work experiences and substantiates that "more is not better."

Hord, Shirley M., and William L. Rutherford. *Taking Charge of Change*, 1987. Available from Association of Supervision and Curriculum Development, 125 North West Street, Alexandria, VA 22314-2798.

This excellent book provides insights and understanding about the roles and personal needs of people involved in educational change. It provides strategies for the total management of an innovation destined for success.

Investing In Our Children: Business and The Public School, 1985. Available from Committee for Economic Development, 477 Madison Avenue, New York, NY 10022.

This "must-read" position paper is a classic on education for employment.

McCormack, Mark H. *What They Don't Teach You at Harvard Business School*, 1984. Available from Bantam Books, Inc., 666 Fifth Avenue, New York, NY 10103.

This is a book that explains how business really works (or doesn't work).

Meyer, David P. *Underemployment from a Human Service Perspective*, 1985. Information Series No. 303. Available from The National Center for Research in Vocational Education, National Center Publications, Box F, 1960 Kenny Road, Columbus, OH 43210-1090.

This book explains that the future trends in working and underemployment must be addressed even in communities where unemployment is not now a serious problem.

Molloy, John T. *How to Work the Competition Into the Ground and Have Fun Doing It*, 1987. Available from Warner Books, Inc., 75 Rockefeller Plaza, New York, NY 10019.

Chapter 4, called "How To Teach Your Child To Be a Super Worker," is particularly relevent. The other chapters are valuable for personal productivity lessons.

*Adapted from a resource compiled by Ginny Krohn, Project Director, Southern Wisconsin Education for Employment Project, 527 South Franklin Street, Janesville, WI 53545-4899.

Naisbitt, John. *Megatrends: Ten New Directions Transforming Our Lives*, 1982. Available from Warner Books, Inc., 75 Rockefeller Plaza, New York, NY 10019.

This publication presents ten trends that will influence the future of working.

Naisbitt, John, and Patricia Aburdene. *Re-inventing the Corporation*, 1985. Available from Warner Books, Inc., 75 Rockefeller Plaza, New York, NY 10019.

Chapter 3, "Re-inventing Work," gives a good framework for understanding the changes in business operations.

Oininen, Charlotte, ed. *Parker Project Reports*, 1983-84. Available from Department of Public Instruction, 125 South Webster Street, P.O. Box 7841, Madison, WI 53707.

This series of booklets discusses the Wisconsin-based research that generated the Education for Employment Standard.

Peters, Thomas J. and Robert H. Waterman, Jr. *In Search of Excellence: Lessons from America's Best-Run Companies*, 1982. Harper and Row, 10 East 53rd Street, New York, NY 10022.

Read at least three or four of the excellent corporation stories. Then compare the trends in corporations to the research on effective schools. The similarities are striking.

Time For Results: The Governors' 1991 Report on Education, 1986. Available from National Governors' Association, Hall of the States, 444 North Capitol Street, Washington, DC 20001-1572.

This book gives a review of the role of education in state plans.

Trounstine, Philip J., and Terry Christensen. *Movers and Shakers: The Study of Community Power*, 1982. Available from St. Martin's Press, Inc., 175 Fifth Avenue, New York, NY 10010.

This in-depth study of community power in two communities outlines ways to determine who to include in an education for employment council.